FILE 'CAPLUS' ENTERED AT 14:24:48 ON 12 JUL 2004

6 SEA FILE=CAPLUS ABB=ON PLU=ON (TEN OR TENASCIN)(W)(M4

OR (MAJOR OR M)(W)4) OR TENM4 OR TEN(W)(M4 OR M 4) OR

TENM 4

L20 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 14 Nov 2003

ACCESSION NUMBER: 2003:892934 CAPLUS

DOCUMENT NUMBER: 139:376210

TITLE: Neuron-specific protein expression in

immortalized hypothalamic neuronal cell lines for potential drug screening and treatment of

neurological disease

INVENTOR(S): Belsham, Denise; Lovejoy, David

PATENT ASSIGNEE(S): Can

SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: E FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA.	PATENT NO.				ND	DATE		A	PPLI	CATI	ON No	NO. DATE				
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AB The present invention is directed to neuron-specific protein expression in immortalized hypothalamic neuronal cell lines for potential drug screening and treatment of neurol. disease. Immortalization of murine fetal hypothalamic cells is accomplished by infection with a retrovirus harboring a viral vector encoding the SV-40 large T antigen, followed by selection and cloning. Microarray anal. of neuron-specific gene expression profiles have identified a variety of neuronal markers expressed in the large set of immortalized hypothalamic neuronal cell lines established. The cell lines of the present invention are useful in the development of exptl. models and in the treatment of disease.

L20 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 19 Sep 2003

ACCESSION NUMBER: 2003:737865 CAPLUS

DOCUMENT NUMBER: 139:256348

TITLE: Sequence homologs of extracellular matrix,

membrane and secreted proteins and cDNAs encoding them and their possible therapeuticuses

INVENTOR(S):

Alsobrook, John P., II; Anderson, David W.; Boldog, Ferenc L.; Burgess, Catherine E.; Chaudhuri, Amitabha; Colman, Steven D.; Edinger, Shlomit R.; Ettenberg, Seth; Gangolli, Esha A.; Gerlach, Valerie L.; Gorman, Linda; Guo, Xiaojia; Kekuda, Ramesh; Li, Li; MacLachlan, Timothy; Malyankar, Uriel M.; Mezes, Peter S.; Miller, Charles E.; Millet, Isabelle; Padigaru, Muralidhara; Patturajan, Meera; Peyman, John; Qian, Xiazhong; Rastelli, Luca; Rieger, Daniel K.; Smithson, Glennda; Spytek, Kimberly A.; Stone, David J.; Sukumaran, Sujatha; Vernet, Corine A. M.; Voss, Edward Z.; Zhong, Mei

PATENT ASSIGNEE(S): SOURCE:

Curagen Corporation, USA PCT Int. Appl., 282 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 140

PATENT INFORMATION:

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PRIORITY APPLN. INFO.:
                                         US 2002-361974P P 20020306
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Searcher : Sh

Shears

571-272-2528

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US 2002-365034P P 20020315
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US 2001-337185P P 20011204
US 2002-345705P P 20020103
US 2002-51874
                A 20020116
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AB The present invention relates to novel polypeptides, and the nucleic acids encoding them, having properties related to stimulation of biochem. or physiol. responses in a cell, a tissue, an organ or an organism. More particularly, the novel polypeptides are gene products of novel genes, or are specified biol. active fragments or derivs. thereof. Methods of use encompass diagnostic and prognostic assay procedures as well as methods of treating diverse pathol. conditions. Sequence homologs of proteins of the extracellular matrix, membrane proteins and receptors are identified and cDNAs encoding them are cloned. The proteins and the cDNAs may be useful in the diagnosis or treatment of disease (no data). Vectors, host cells, antibodies and recombinant methods for producing the polypeptides and polynucleotides, as well as methods for using same are also included. The invention further discloses therapeutic, diagnostic and research methods for diagnosis, treatment, and prevention of disorders involving any one of these novel human nucleic acids and proteins.

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L20 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
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ED Entered STN: 26 Jul 2002

ACCESSION NUMBER: 2002:555655 CAPLUS

DOCUMENT NUMBER: 137:120715

TITLE:

Human cDNA sequences and their encoded proteins

INVENTOR(S):

and diagnostic and therapeutic uses

Gangolli, Esha A.; Patturajan, Meera; Vernet, Corine A. M.; Malyankar, Uriel M.; Kekuda, Ramesh; Stone, David J.; Anderson, David; Shimkets, Richard A.; Burgess, Catherine E.; Zerhusen, Bryan D.; Liu, Xiaohong; Spytek, Kimberly A.; Casman, Stacie J.; Boldog, Ferenc

L.; Smithson, Glennda; Li, Li; Ji, Weizhen

PATENT ASSIGNEE(S): Curagen Corporation, USA

SOURCE:

PCT Int. Appl., 318 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO. DATE
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                             20030814
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             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
             NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
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             SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
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                                           EP 2001-993342
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     US 2004033971
                      A1 20040219
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                                                             20011219
PRIORITY APPLN. INFO.:
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                                                         Ρ
                                                             20001219
                                        WO 2001-US50331
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AB Disclosed herein are 17 cDNA sequences that encode novel human polypeptides that are members of the following protein families: EGF related SCUBE1-like proteins, adipocyte complement related protein, complement Clq tumor necrosis factor-like proteins, β-adrenergic receptor kinase-like proteins, TENM4 -like proteins, Out At First-like proteins, EphA6-ehk2-like proteins, glucose transporter-like proteins, type Ia membrane sushi-containing domain-like proteins, butyrophilin-like proteins, and butyrophilin precursor B7-DC-like proteins. Also disclosed are polypeptides encoded by these nucleic acid sequences, and antibodies, which immunospecifically-bind to the polypeptide, as well as derivs., variants, mutants, or fragments of the aforementioned polypeptide, polynucleotide, or antibody. invention further discloses therapeutic, diagnostic and research methods for diagnosis, treatment, and prevention of disorders involving any one of these novel human nucleic acids and proteins.

L20 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN ED Entered STN: 19 Jul 2002

ACCESSION NUMBER: 2002:539837 CAPLUS

DOCUMENT NUMBER: TITLE:

137:89481

INVENTOR(S):

Human proteins and their cDNA sequences and

diagnostic and therapeutic uses

Padigaru, Muralidhara; Li, Li; Zerhusen, Bryan D.; Casman, Stacie J.; Shenoy, Suresh; Spytek, Kimberly A.; Zhong, Mei; Gangolli, Esha A.; Burgess, Catherine E.; Patturajan, Meera; Vernet, Corine A. M.; Taylor, Sarah; Tchernev, Velizar T.; Miller, Charles E.; Guo, Xiaojia; Boldog, Ferenc L.; Grosse, William M.; Alsobrook, John P., II; Gerlach, Valerie; Edinger, Schlomit; Rothenberg, Mark E.; Ellerman, Karen; MacDougall, John; Malyankar,

Uriel; Millet, Isabelle; Peyman, John; Smithson, Glennda; Gunther, Erik; Stone, David J.

PATENT ASSIGNEE(S):

SOURCE:

Curagen Corporation, USA PCT Int. Appl., 358 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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US 2004029216 A1 20040212								001-2 001-2 001-2 001-2	26041 26083 27233 27481 28470	17P 31P 38P 76P 04P	P P P P	2002 2001 2001 2001 2001 2001	0109 0110 0228 0309 0418	

Disclosed herein are 25 cDNA sequences that encode novel human polypeptides (designated NOV1 to NOV19 plus isoforms). Chromosome locations, domain structure, tissue typing, and single nucleotide polymorphisms are also provided. Also disclosed are polypeptides encoded by these nucleic acid sequences, and antibodies, which immunospecifically-bind to the polypeptide, as well as derivs., variants, mutants, or fragments of the aforementioned polypeptide, polynucleotide, or antibody. The invention further discloses therapeutic, diagnostic and research methods for diagnosis, treatment, and prevention of disorders involving any one of these novel human nucleic acids and proteins.

L20 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 26 Sep 1999

ACCESSION NUMBER: 1999:608070 CAPLUS

DOCUMENT NUMBER: 131:349228

TITLE: Compartmentalized expression of zebrafish ten-m3

and ten-m4, homologues of

the Drosophila tenm/odd Oz gene, in the central

nervous system

AUTHOR(S): Mieda, M.; Kikuchi, Y.; Hirate, Y.; Aoki, M.;

Okamoto, H.

CORPORATE SOURCE: Brain Science Institute, Laboratory for

Developmental Gene Regulation, RIKEN, Saitama,

Japan

SOURCE: Mechanisms of Development (1999), 87(1,2),

223-227

CODEN: MEDVE6; ISSN: 0925-4773 Elsevier Science Ireland Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English
AB Zebrafish ten-m3 and ten-m4 encode

AB Zebrafish ten-m3 and ten-m4 encode proteins highly similar to the product of Drosophila pair-rule gene tenm/odd Oz (odz). Their products contain 8 EGF-like repeats that resemble mostly those of the extracellular matrix mol. tenascin. During segmentation period, ten-m3 is expressed in the somites, notochord, pharyngeal arches, and the brain, while expression of ten-m4 is mainly restricted to the brain. In the developing brain, ten-m3 and ten-m4 expression delineates several compartments. Interestingly, ten-m3 and ten-m4 show expression patterns complementary to each other in

m4 show expression patterns complementary to each other in the developing forebrain and midbrain along both rostrocaudal and dorsoventral axes, depending on developmental stages and locations.

REFERENCE COUNT:

PUBLISHER:

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN

11

ED Entered STN: 14 May 1999

ACCESSION NUMBER: 1999:296444 CAPLUS

DOCUMENT NUMBER: 131:85830

TITLE: Mouse ten-m/odz is a new family of dimeric type

II transmembrane proteins expressed in many

tissues

AUTHOR(S): Oohashi, Toshitaka; Zhou, Xiao-Hong; Feng, Kang;

Richter, Brigitta; Morgelin, Matthias; Perez, Maria Thereza; Su, Wei-Dong; Chiquet-Ehrismann,

Ruth; Rauch, Uwe; Fassler, Reinhard

CORPORATE SOURCE: Max Planck Institute for Biochemistry,

Martinsried, 82152, Germany

SOURCE: Journal of Cell Biology (1999), 145(3), 563-577

CODEN: JCLBA3; ISSN: 0021-9525

PUBLISHER: Rockefeller University Press

DOCUMENT TYPE: Journal LANGUAGE: English

AB The Drosophila gene ten-m/odz is the only pair rule gene identified to date which is not a transcription factor. In an attempt to analyze the structure and the function of ten-m/odz in mouse, the

authors isolated four murine ten-m cDNAs which code for proteins of 2700-2800 amino acids. All four proteins (Ten-m1-4) lack signal peptides at the N-terminus, but contain a short hydrophobic domain characteristic of transmembrane proteins, 300-400 amino acids after the N-terminus. About 200 amino acids C-terminal to this hydrophobic region are eight consecutive EGF-like domains. Cell transfection, biochem., and electron microscopic studies suggest that Ten-ml is a dimeric type II transmembrane protein. Expression of fusion proteins composed of the N-terminal and hydrophobic domain of ten-m1 attached to the alkaline phosphatase reporter gene resulted in membrane-associated staining of the alkaline phosphatase. Electron microscopic and electrophoretic anal. of a secreted form of the extracellular domain of Ten-m1 showed that Ten-m1 is a disulfide-linked dimer and that the dimerization is mediated by EGF-like modules 2 and 5 which contain an odd number of cysteines. Northern blot and immunohistochem. analyses revealed widespread expression of mouse ten-m genes, with most prominent expression in brain. All four ten-m genes can be expressed in variously spliced mRNA isoforms. The extracellular domain of Ten-m1 fused to an alkaline phosphatase reporter bound to specific regions in many tissues which were partially overlapping with the Ten-ml immunostaining. Far Western assays and electron microscopy demonstrated that Ten-m1 can bind to itself.

REFERENCE COUNT:

48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 14:37:08 ON 12 JUL 2004)

L21 12 S L20

L22 4 DUP REM L21 (8 DUPLICATES REMOVED)

ANSWER 1 OF 4 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on

STN

ACCESSION NUMBER: 2002:459512 BIOSIS DOCUMENT NUMBER: PREV200200459512

TITLE: All four members of the Ten-m/Odz family of

transmembrane proteins form dimers.

AUTHOR(S): Feng, Kang; Zhou, Xiao-Hong; Oohashi, Toshitaka;

Moergelin, Matthias; Lustig, Ariel; Hirakawa,

Satoshi; Ninomiya, Yoshifumi; Engel, Juergen; Rauch,

Uwe; Faessler, Reinhard [Reprint author]

CORPORATE SOURCE: Max Planck Institute for Biochemistry, Am

Klopferspitz 18a, D-82152, Martinsried, Germany

faessler@biochem.mpg.de

SOURCE: Journal of Biological Chemistry, (July 19, 2002) Vol.

277, No. 29, pp. 26128-26135. print.

CODEN: JBCHA3. ISSN: 0021-9258.

DOCUMENT TYPE:

Article LANGUAGE: English

ENTRY DATE: Entered STN: 28 Aug 2002

Last Updated on STN: 28 Aug 2002

Ten-m/Odz/teneurins are a new family of four distinct type II AΒ transmembrane molecules. Their extracellular domains are composed of an array of eight consecutive EGF modules followed by a large globular domain. Two of the eight modules contain only 5 instead of

the typical 6 cysteine residues and have the capability to dimerize in a covalent, disulfide-linked fashion. The structural properties of the extracellular domains of all four mouse Ten-m proteins have been analyzed using secreted, recombinant molecules produced by mammalian HEK-293 cells. Electron microscopic analysis supported by analytical ultracentrifugation data revealed that the recombinant extracellular domains of all Ten-m proteins formed homodimers. SDS-PAGE analysis under nonreducing conditions as well as negative staining after partial denaturation of the molecules indicated that the globular COOH-terminal domains of Ten-m1 and -m4 contained subdomains with a pronounced stability against denaturing agents, especially when compared with the homologous domains of Ten-m2 and -m3. Cotransfection experiments of mammalian cells with two different extracellular domains revealed that Ten-m molecules have also the ability to form heterodimers, a property that, combined with alternative splicing events, allows the formation of a multitude of molecules with different characteristics from a limited set of genes.

L22 ANSWER 2 OF 4

MEDLINE on STN

DUPLICATE 1

ACCESSION NUMBER: DOCUMENT NUMBER:

1999425191 MEDLINE PubMed ID: 10495292

TITLE:

Compartmentalized expression of zebrafish ten-m3 and

ten-m4, homologues of the

Drosophila ten(m)/odd Oz gene, in the central nervous

AUTHOR:

Mieda M; Kikuchi Y; Hirate Y; Aoki M; Okamoto H

CORPORATE SOURCE: Laboratory for Developmental Gene Regulation, Brain Science Institute, RIKEN, 2-1 Hirosawa, Wako-shi,

Saitama, Japan.

SOURCE:

Mechanisms of development, (1999 Sep) 87 (1-2) 223-7.

Journal code: 9101218. ISSN: 0925-4773.

PUB. COUNTRY:

Ireland

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

OTHER SOURCE:

GENBANK-AB026979; GENBANK-AB026980

ENTRY MONTH:

200003

ENTRY DATE:

Entered STN: 20000327

Last Updated on STN: 20000327 Entered Medline: 20000316

AΒ Zebrafish ten-m3 and ten-m4 encode proteins highly similar to the product of Drosophila pair-rule gene ten(m)/odd Oz (odz). Their products contain eight epidermal growth factor (EGF)-like repeats that resemble mostly those of the extracellular matrix molecule tenascin. During segmentation period, ten-m3 is expressed in the somites, notochord, pharyngeal arches, and the brain, while expression of ten-m4 is mainly restricted to the brain. In the developing brain, ten-m3 and ten-m4 expression delineates several compartments. Interestingly, ten-m3 and ten-m4 show expression patterns complementary to each other in the developing forebrain and midbrain along both rostrocaudal and dorsoventral axes, depending on developmental stages and locations.

L22 ANSWER 3 OF 4

MEDLINE on STN

DUPLICATE 2

Searcher :

Shears

571-272-2528

ACCESSION NUMBER: DOCUMENT NUMBER:

97017046 MEDLINE

PubMed ID: 8863659

TITLE:

CD79 alpha expression in acute myeloid leukemia. High

frequency of expression in acute promyelocytic

leukemia.

AUTHOR:

Arber D A; Jenkins K A; Slovak M L

CORPORATE SOURCE:

Division of Pathology, City of Hope National Medical

Center, Duarte, California 91010, USA.

SOURCE:

American journal of pathology, (1996 Oct) 149 (4)

1105-10.

Journal code: 0370502. ISSN: 0002-9440.

PUB. COUNTRY: United States

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Abridged Index Medicus Journals; Priority Journals

199612

ENTRY MONTH: ENTRY DATE:

Entered STN: 19970128

Last Updated on STN: 19970128 Entered Medline: 19961204

AΒ CD79 alpha is a subunit of an intracytoplasmic protein reported to be specific for B lymphocytes, including immature B lineage cells. To evaluate expression of the CD79 alpha antigen in acute myeloid leukemia (AML), we studied forty-eight cases of AML by paraffin section immunohistochemistry. The cases included four MO, nine M1, nine M2, ten M3, ten M4, and six M5 AMLs using criteria of the French-American-British cooperative group. Eleven cases demonstrated cytoplasmic staining for the CD79 alpha antigen, including one M1, nine M3, and one M5 AML. These CD79 alpha-positive cases represented 5% of all non-promyelocytic AMLs and 90% of all acute promyelocytic leukemias studied. All acute promyelocytic leukemias had the characteristic t(15;17) (q24;q21), including two cases of the microgranular variant (M3v). No other B-lineage-associated antigens were found in the CD79 alpha-positive cases, with the exception of a subpopulation of CD19-positive leukemic cells in one patient. The two non-promyelocytic leukemias that expressed CD79 alpha had no evidence of t(15;17) and did not express any additional B-lineage-associated antigens that might suggest a mixed lineage proliferation. This study demonstrates that CD79 alpha expression in acute leukemia is not restricted to B-lineage acute lymphoblastic leukemias and that CD79 alpha expression is frequently associated with t(15;17) acute myeloid leukemia.

L22 ANSWER 4 OF 4

MEDLINE on STN

DUPLICATE 3

ACCESSION NUMBER: DOCUMENT NUMBER:

CORPORATE SOURCE:

89248805 MEDLINE PubMed ID: 2785843

TITLE:

Acute myelogenous leukemia with leukemia cutis.

Eighteen cases seen between 1969 and 1986.

AUTHOR:

Baer M R; Barcos M; Farrell H; Raza A; Preisler H D Department of Hematologic Oncology, Roswell Park

Memorial Institute, Buffalo, New York 14263.

SOURCE:

Cancer, (1989 Jun 1) 63 (11) 2192-200. Journal code: 0374236. ISSN: 0008-543X.

United States

PUB. COUNTRY: DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

Searcher :

Shears

571-272-2528

FILE SEGMENT:

Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH:

198906

ENTRY DATE:

Entered STN: 19900306

Last Updated on STN: 19900306

Entered Medline: 19890628

AB Leukemia cutis was documented by biopsy in 18 of 877 patients (2%) with acute myelogenous leukemia (AML) seen at Roswell Park Memorial Institute (Buffalo, NY) between 1969 and 1986. French-American-British (FAB) types included four M2, one M3, ten M4, and three M5. Lysozyme was more consistently detectable in skin sections in our cases than Leu-M1, alpha-1-antitrypsin, alpha-1-antichymotrypsin, or chloroacetate esterase activity. Additional extramedullary sites of involvement were present in 16 patients, including meningeal leukemia in six. Two patients had leukemia cutis preceding bone marrow leukemia. Skin was the initial site of relapse in 11 patients, without marrow relapse, occurring as late as 5.5 years after diagnosis. Most patients in this retrospective series were treated with radiation therapy and/or palliative chemotherapy, and did poorly, with prompt bone marrow relapses and serial skin relapses. Long-term disease-free survival was achieved in the one patient whose skin relapse was treated with whole-body electron-beam radiation therapy in conjunction with reinduction and consolidation chemotherapy. Severe skin toxicity was caused by administration of Adriamycin (doxorubicin) 12 days after electron-beam irradiation in one patient, but was not seen when cytosine arabinoside was administered in doses up to 3 g/m2 in conjunction with radiation therapy. This retrospective review suggests that optimal management of AML involving skin might include whole-body electron-beam irradiation in conjunction with induction or reinduction chemotherapy without anthracyclines, followed by consolidation chemotherapy. Additionally, there should be ongoing surveillance for and treatment of extramedullary disease at other sites, including the meninges.

FILE 'REGISTRY' ENTERED AT 14:27:42 ON 12 JUL 2004 E PROTEIN NOV4/CN 5 33 S PROTEIN NOV4 ?/CN

(FILE 'CAPLUS' ENTERED AT 14:40:59 ON 12 JUL 2004)

L6 33 SEA FILE=REGISTRY ABB=ON PLU=ON PROTEIN NOV4 ?/CN
L7 44 SEA FILE=CAPLUS ABB=ON PLU=ON L6 OR (PROTEIN OR

44 SEA FILE=CAPLUS ABB=ON PLU=ON L6 OR (PROTEIN OR POLYPROTEIN OR POLYPEPTIDE OR PEPTIDE) (5A) NOV4

L8 40 SEA FILE=CAPLUS ABB=ON PLU=ON L7 AND (POLYNUCLEOTIDE OR POLY NUCLEOTIDE)

L25 6 SEA FILE=CAPLUS ABB=ON PLU=ON L8 AND (TENASCIN OR TENM# OR TEN M# OR MEMBRAN?)

L26 5 L25 NOT L20

L6

L26 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 13 Dec 2002

ACCESSION NUMBER: 2002:946440 CAPLUS

DOCUMENT NUMBER: 138:38058

TITLE: Human NOVX polypeptides, polynucleotides and antibodies for diagnosis, prognosis and

INVENTOR(S):

therapy of NOVX-associated disorders and cancers Anderson, David W.; Zerhusen, Bryan D.; Li, Li; Zhong, Mei; Casman, Stacie J.; Gerlach, Valerie L.; Shimkets, Richard A.; Gorman, Linda; Pena, Carol E. A.; Kekuda, Ramesh; Patturajan, Meera; Spytek, Kimberly A.; Leite, Mario W.; Rastelli, Luca; MacDougall, John R.; Taupier, Raymond J., Jr.; Guo, Xiaojia; Miller, Charles E.; Shenoy, Suresh G.; Hjalt, Tord; Voss, Edward Z.; Boldog, Ferenc L.; Malyankar, Uriel M.; Padigaru, Muralidhara; Ji, Weizhen; Smithson, Glennda; Edinger, Shlomit R.; Millet, Isabelle; Ellerman, Karen

PATENT ASSIGNEE(S):

SOURCE:

Curagen Corporation, USA PCT Int. Appl., 461 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

140

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	TENT	NO.		KI:		DATE			A	PPLI	CATI	ON N	ο.	DATE		
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		LC,	LK, NZ,	LR, OM,	LS, PH,	LT, PL,	LU, PT,	LV, RO,	MA, RU,	MD, SD,	MG, SE,	MK, SG,	MN, SI,	MW, SK, ZM,	MX, SL,	MZ, TJ,
	RW:	AZ, GH,	BY, GM,	KG, KE,	KZ, LS,	MD, MW,	RU, MZ,	TJ, SD,	TM SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,
		SE, SN,	TR, TD,	BF, TG	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
US	2004 2004 1401	0185		A: A: A2	l :	2004(2004(2004(0129		U.	S 20	02-1	6233! 6149: 3202'	3	2002 2002 2002	0603	
IIG	R: 2004	PT,	ΙE,	SI,	LT,	LV,	FI,	RO,	GB, MK,	GR, CY,	IT, AL,	LI,	LU,	NL,	SE,	MC,
PRIORITY								1 1 1 • t	JS 20 JS 20 JS 20 JS 20 JS 20	001-2 001-2 001-2 001-2 001-2	2956 2964 2964 2965 2974 2975	07P 04P 18P 75P 14P 67P	P P P P P	20010 20010 20010 20010 20010 20010 20010	0604 0606 0606 0607 0611	
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US 2001-301530P P
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 US 2001-301550P P
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US 2002-161493
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US 2002-383830P
                 Р
                    20020529
WO 2002-US17559
                 W 20020604
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Disclosed herein are nucleic acid sequences that encode NOVX polypeptides such as NOV1, NOV2, NOV3, etc.. Also disclosed are antibodies, which immunospecifically-bind to the polypeptide, as well as derivs., variants, mutants, or fragments of the aforementioned polypeptide, polynucleotide, or antibody. The invention further discloses therapeutic, diagnostic and research

methods for diagnosis, prognosis, treatment, and prevention of human diseases involving any one of these novel human nucleic acids, polypeptides, or antibodies, or fragments thereof, such as cancer.

L26 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN Entered STN: 25 Oct 2002 ACCESSION NUMBER: 2002:814267 CAPLUS DOCUMENT NUMBER: 137:321361 TITLE: Human cDNA sequences and their encoded proteins and diagnostic and therapeutic uses INVENTOR(S): Li, Li; Gerlach, Valerie; Liu, Xiaohong; Miller, Charles E.; Spytek, Kimberly A.; Zerhusen, Bryan D.; Pena, Carol E. A.; Shenoy, Suresh G.; Zhong, Haihong; Smithson, Glennda; Casman, Stacie J.;
Boldog, Ferenc L.; Voss, Edward Z.; Vernet, Corine A. M.; MacDougall, John R.; Rastelli, Luca; Anderson, David W.; Zhong, Mei; Mezes, Peter D.; Furtak, Katarzyna; Patturajan, Meera; Burgess, Catherine E.; Malyankar, Uriel M.; Shimkets, Richard A.; Taupier, Raymond J., Jr.; Edinger, Shlomit R.; Mazur, Ann PATENT ASSIGNEE(S): Curagen Corporation, USA SOURCE: PCT Int. Appl., 320 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 140 PATENT INFORMATION:

F	PATENT NO.					KIND DATE				A.		CATI		ο.	DATE			
		20020								W				13	2002	0403		
			AE, CN, GE, LC, NO, TM,	AG, CO, GH, LK, NZ, TN,	AL, AM, AT, AU, CR, CU, CZ, DE, GM, HR, HU, ID, LR, LS, LT, LU, OM, PH, PL, PT, TR, TT, TZ, UA, KG, KZ, MD, RU,			DK, IL, LV, RO, UG,	DM, IN, MA, RU, US,	DZ, IS, MD, SD,	EC, JP, MG, SE,	EE, KE, MK, SG,	ES, KG, MN, SI,	FI, KP, MW, SK,	GB, KR, MX, SL,	GD, KZ, MZ, TJ,		
		RW:	GH, CH, SE,	GM, CY,	KE, DE, BF,	LS, DK,	MW, ES,	MZ, FI,	SD, FR,	SL, GB,	GR,	IE,	IT,	LU,	ZW, MC, ML,	NL,	PT,	
		20040																
			AT, PT,	BE, IE,	CH, SI,	DE, LT,	DK, LV,	ES, FI,	FR, RO,	GB, MK,	GR, CY,	IT, AL,	LI, TR	LU,	NL,	SE,	MC,	
	US 2003203843 A1 2						_ 0.0.	2 3 3.0)))))	JS 20 JS 20 JS 20 JS 20 JS 20 JS 20	001-2 001-2 001-2 001-2 001-2	28113 28186 28196 28293 28365 28365	36P 53P 06P 34P 57P 78P	P P P P P	2001(2001(2001(2001(2001(2001(2001(0403 0405 0405 0410 0413		

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US 2001-283710P P 20010413
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WO 2002-US10713 W 20020403
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Disclosed herein are 45 cDNA sequences that encode novel human AΒ polypeptides that are members of the following protein families: prorelaxin H2, CGI-67, cystatin, undulin, kallikrein, neurophysin, cathepsin L, secreted protein, high-(glycine + tyrosine) keratin, interleukin 8, brush border 61.0 kDa protein, MMP-1, heparanase, MMP-3, MMP-13, BCG-induced integral membrane protein, carboxypeptidase B, matrix metalloprotease, fibropellin I, interleukin receptor, properdin, and carboxyl esterase. Also disclosed are polypeptides encoded by these nucleic acid sequences, and antibodies, which immunospecifically-bind to the polypeptide, as well as derivs., variants, mutants, or fragments of the aforementioned polypeptide, polynucleotide, or antibody. The invention further discloses therapeutic, diagnostic and research methods for diagnosis, treatment, and prevention of disorders involving any one of these novel human nucleic acids and proteins.

473646-92-3P

RL: ANT (Analyte); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)

(amino acid sequence; human cDNA sequences and their encoded proteins and diagnostic and therapeutic uses)

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L26 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
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Entered STN: 30 Aug 2002

ACCESSION NUMBER: 2002:658259 CAPLUS

DOCUMENT NUMBER:

TITLE:

137:212012

Human cDNA sequences and their encoded proteins

and diagnostic and therapeutic uses

INVENTOR(S):

Malyankar, Uriel M.; Shenoy, Suresh G.; Spytek, Kimberly A.; Zerhusen, Bryan D.; Patturajan, Meera; Guo, Xiaojia; Kekuda, Ramesh; Gangolli, Esha A.; Shimkets, Richard A.; Taupier, Raymond

J., Jr.; Li, Li; Padigaru, Muralidhara

PATENT ASSIGNEE(S):

SOURCE:

Curagen Corporation, USA PCT Int. Appl., 295 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

140

PATENT INFORMATION:

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PATENT NO.
                          KIND
                                 DATE
                                                  APPLICATION NO.
                                                                       DATE
      WO 2002066643
                           A2
                                 20020829
                                                   WO 2001-US48732
                                                                      20011113
      WO 2002066643
                           A3
                                 20030626
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
               NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
           RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,
                CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
                TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
                TD, TG
      US 2003207800
                                 20031106
                           A1
                                                  US 2001-15115
                                                                      20011113
PRIORITY APPLN. INFO.:
                                               US 2000-248153P P 20001113
                                               US 2000-249598P P
                                                                      20001117
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                                                                      20010126
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                                                                  Ρ
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                                                                  Ρ
                                                                      20010216
                                              US 2001-304348P P
                                                                      20010710
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                                                                  Ρ
                                                                      20010731
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                                                                 P
                                              US 2000-749598P
                                                                      20001117
                                              US 1999-264240P P 20010126
      Disclosed herein are 24 cDNA sequences that encode novel human
AΒ
      polypeptides that are members of the following protein families:
      membrane protein/neuropilin/metalloproteinase-like,
      fibrillin-like, KIAA1589-like, WD40 motif-like, opioid Bing cell
      adhesion mol.-like, triacylglycerol lipase-like, IgE receptor
      \beta-subunit-like, Munc18-like, Ig-like, and type II
      cytokeratin-like. Also disclosed are polypeptides encoded by these
      nucleic acid sequences, and antibodies, which immunospecifically-
      bind to the polypeptide, as well as derivs., variants, mutants, or
      fragments of the aforementioned polypeptide, polynucleotide
      , or antibody. The invention further discloses therapeutic,
     diagnostic and research methods for diagnosis, treatment, and
      prevention of disorders involving any one of these novel human
     nucleic acids and proteins.
ΙT
      454489-77-1P
      RL: ANT (Analyte); BPN (Biosynthetic preparation); BSU (Biological
```

study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)

(amino acid sequence; human cDNA sequences and their encoded proteins and diagnostic and therapeutic uses)

ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN Entered STN: 16 Aug 2002

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ACCESSION NUMBER:
                           2002:615841 CAPLUS
DOCUMENT NUMBER:
                           137:164749
TITLE:
                           Human cDNA sequences and their encoded proteins
                           and diagnostic and therapeutic uses
INVENTOR(S):
                           Spytek, Kimberly A.; Li, Li; Wolenc, Adam R.;
                           Vernet, Corine A. M.; Eisen, Andrew; Liu,
                           Xiaohong; Malyankar, Uriel; Shimkets, Richard
                           A.; Tchernev, Velizar T.; Spaderna, Steven K.;
                           Gorman, Linda; Kekuda, Ramesh; Patturajan,
                           Meera; Gusev, Vladimir; Gangolli, Esha A.; Guo,
                           Xiaojia; Shenoy, Suresh; Rastelli, Luca; Casman,
                           Stacie J.; Boldog, Ferenc; Burgess, Catherine
                           E.; Edinger, Schlomit; Ellerman, Karen; Gunther,
                           Erik; Smithson, Glennda; Millet, Isabelle;
                           MacDougall, John R.
PATENT ASSIGNEE(S):
                           Curagen Corporation, USA
SOURCE:
                           PCT Int. Appl., 444 pp.
                           CODEN: PIXXD2
DOCUMENT TYPE:
                           Patent
LANGUAGE:
                           English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                       KIND DATE
                                              APPLICATION NO.
                                                                DATE
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                              _____
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     WO 2002062999
                        A2
                              20020815
                                              WO 2001-US49976 20011231
     WO 2002062999
                        C1
                              20020926
                      A3
     WO 2002062999
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         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
              CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
              SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
              SN, TD, TG
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                            20031022
                                              EP 2001-999178
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              PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     US 2004022781
                        A1 20040205
                                             US 2001-38854
                                                                20011231
PRIORITY APPLN. INFO.:
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                                                                20010529
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US 2001-312915P P 20010816 US 2001-322699P P 20010817 US 2001-313325P P 20010917 US 2001-333350P P 20011126

WO 2001-US49976 W 20011231 AΒ Disclosed herein are 30 cDNA sequences that encode novel human polypeptides that are members of the following protein families: lysosomal acid lipase, MEGF/Flamingo/Cadherin, coagulation factor IX, carbonic anhydrase IV, neural cell adhesion mol., phospholipase C\delta, 3α -hydroxy steroid dehydrogenase, squalene desaturase, lymphocyte antigen 64, acyl-CoA desaturase, Wnt 10B, Kilon protein, organic cation transporter, D- β -hydroxybutyrate dehydrogenase, Ten-M3, aldose reductase, apolipoprotein A-1, and S3_12. Also disclosed are polypeptides encoded by these nucleic acid sequences, and antibodies, which immunospecifically-bind to the polypeptide, as well as derivs., variants, mutants, or fragments of the aforementioned polypeptide, polynucleotide, or antibody. The invention further discloses therapeutic, diagnostic and research methods for diagnosis, treatment, and prevention of disorders involving any one of these novel human nucleic acids and proteins.

IT 448301-92-6P

RL: ANT (Analyte); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)

(amino acid sequence; human cDNA sequences and their encoded proteins and diagnostic and therapeutic uses)

L26 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 20 Apr 2001

ACCESSION NUMBER: 200

2001:283999 CAPLUS

DOCUMENT NUMBER:

134:306183

TITLE:

Human olfactory receptor and encoding polynucleotide sequences and their use

for odorant fingerprinting

INVENTOR(S):

Bellenson, Joel; Smith, Dexster; Lancet, Doron;

Glusman, Gustavo; Fuchs, Tania; Yanai, Itai

PATENT ASSIGNEE(S):

Digiscents, USA; Yeda Research and Development

Co., Ltd.

SOURCE:

PCT Int. Appl., 1857 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

3

PATENT INFORMATION:

PATENT NO.	KIND DA	ATE	APPLICATION NO.	DATE
WO 2001027158	A2 20	 0010419	WO 2000-US27582	
WO 2001027158			WO 2000-052/582	20001006
CN, CR, GM, HR, LR, LS, PL, PT,	CU, CZ, D HU, ID, I LT, LU, L RO, RU, S	DE, DK, DM, IL, IN, IS, LV, MA, MD, 1 SD, SE, SG,	BA, BB, BG, BR, BY, DZ, EE, ES, FI, GB, JP, KE, KG, KP, KR, MG, MK, MN, MW, MX, SI, SK, SL, TJ, TM, ZW, AM, AZ, BY, KG,	GD, GE, GH, KZ, LC, LK, MZ, NO, NZ, TR, TT, TZ,
RW: GH, GM,	KE, LS, M DK, ES, F	W, MZ, SD, FI, FR, GB,	SL, SZ, TZ, UG, ZW, GR, IE, IT, LU, MC,	AT, BE, CH, NL, PT, SE,

BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: US 1999-158615P P 19991008 US 2000-184809P P 20000224 The present invention provides polynucleotide sequences which encode polypeptides involved in olfactory sensation and their use in screening for olfactory agonists and antagonists. The polynucleotide sequences were identified using oligonucleotide primers complementary to olfactory receptor membrane-spanning regions to amplify cDNA prepared from poly(A) + RNA isolated from human olfactory epithelial tissue. A datamining pipeline was also built to detect all available olfactory receptor-like sequences in the public databases and to update the results as new database versions are released. In addition to 115 cDNA sequences isolated from human olfactory epithelia, datamining provides 932 olfactory receptor-encoding polynucleotides which are deposited and described in the Human Olfactory Receptor Data Exploratorium (http://www.bioinfo.weizman.ac.il/HORDE). present invention also provides the polypeptides encoded by these polynucleotide sequences, vectors comprising these polynucleotide sequences, and host cells transfected with these polynucleotide sequences. The present invention further provides for functional variants and homologs of these polynucleotide sequences and the polypeptides encoded by these polynucleotides. Libraries of polypeptides are also provided. Also included in the present invention is the use of these polypeptides and libraries of polypeptides in screening odorant mols. to determine the correspondence (scent representation, scent fingerprint, or scent profile) between individual odorant receptors (the polypeptides) and particular odorant mols. Also encompassed by the present invention is the use of the scent representation, scent fingerprint, or scent profile to re-create and edit scents. ΙT 335068-96-7 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence); USES (Uses) (amino acid sequence; human olfactory receptor and encoding polynucleotide sequences and their use for odorant fingerprinting) (FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 14:39:48 ON 12 JUL 2004) L6 33 SEA FILE=REGISTRY ABB=ON PLU=ON PROTEIN NOV4 ?/CN 44 SEA FILE=CAPLUS ABB=ON PLU=ON L6 OR (PROTEIN OR POLYPROTEIN OR POLYPEPTIDE OR PEPTIDE) (5A) NOV4 40 SEA FILE=CAPLUS ABB=ON PLU=ON L7 AND (POLYNUCLEOTIDE OR POLY NUCLEOTIDE) L24 8 SEA L8 L27 8 L24 NOT L21 => dup rem 127 PROCESSING COMPLETED FOR L27 L28 8 DUP REM L27 (0 DUPLICATES REMOVED)

ACCESSION NUMBER: CROSS REFERENCE:

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L28 ANSWER 1 OF 8 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
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                      2001-648134 [74]; 2002-017601 [02]; 2002-090517
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                      2003-201550 [19]; 2003-210149 [20]; 2003-210304
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                      [06]; 2004-070750 [07]; 2004-081706 [08];
                      2004-081707 [08]; 2004-081935 [08]; 2004-082483
                      [08]; 2004-090456 [09]; 2004-090517 [09];
                      2004-108206 [11]; 2004-108207 [11]; 2004-108210
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2004-130990 [13]; 2004-143267 [14]; 2004-168942 [16]; 2004-179665 [17]; 2004-180039 [17]; 2004-180659 [17]; 2004-180660 [17]; 2004-191379 [18]; 2004-191740 [18]; 2004-203286 [19]; 2004-212692 [20]; 2004-213931 [20]; 2004-213932 [20]; 2004-224146 [21]; 2004-225693 [21]; 2004-226190 [21]; 2004-268786 [25]; 2004-355290 [33]; 2004-355303 [33] DOC. NO. NON-CPI: N2003-045367 DOC. NO. CPI: C2003-014999 TITLE: New polypeptides, designated as NOVX, useful for diagnosing and treating infections, neurological diseases, cancer, allergy, and bone, immunological, skin, renal, brain, muscle and autoimmune disorders. DERWENT CLASS: B04 D16 S03 INVENTOR(S): ANDERSON, D; ANDREW, D; BALLINGER, R; BAUMGARTNER, J; BOLGOG, F; BURGESS, C E; CASMAN, S; DECRISTOFARO, M F; EISEN, A; FERNANDES, E; GERLACH, V; GUO, X; GUSEV, V; KEKUDA, R; LI, L; LIU, X; MALYANKAR, U; MEZES, P; MILLER, C; PADIGARU, M; PATTURAJAN, M; PENA, C; RASTELLI, L; SHENOY, S; SHIMKETS, R A; SMITHSON, G; SPYTEK, K A; TAILLON, B; TAUPIER, R J; TCHERNEV, V; VERNET, C A M; WOLENC, A; ZERHUSEN, B; ZHONG, H; ZHONG, M; BOLDOG, PATENT ASSIGNEE(S): (CURA-N) CURAGEN CORP COUNTRY COUNT: 100 PATENT INFORMATION:

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AU	2002	2309	483	3	A 1	200	210	021	(20	0043	39)										

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002081517 EP 1360198	A2 A2	WO 2002-US2064 EP 2002-736481 WO 2002-US2064	20020122 20020122 20020122
AU 2002309483	A1	AU 2002-309483	20020122

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                     A2 Based on WO 2002081517
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PRIORITY APPLN. INFO: US 2001-334198P
                                            20011129; US
                      2001-262892P
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                                      20010123; US
                      2001-263598P
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                                        20010124; US
                      2001-264117P
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    [23]; 2003-313241 [30]; 2003-313242 [30]; 2003-313246 [30];
    2003-354532 [33]; 2003-381625 [36]; 2003-381626 [36]; 2003-381704
    [36]; 2003-421273 [39]; 2003-441551 [41]; 2003-441553 [41];
    2003-441554 [41]; 2003-441555 [41]; 2003-513974 [48]; 2003-533005
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[50]; 2003-540616 [51]; 2003-559132 [52]; 2003-577521 [54]; 2003-587288 [55]; 2003-605764 [57]; 2003-616003 [58]; 2003-616004 [58]; 2003-625633 [59]; 2003-646149 [61]; 2003-663472 [62]; 2003-671490 [63]; 2003-679626 [64]; 2003-697551 [66]; 2003-697890 [66]; 2003-722330 [68]; 2003-748127 [70]; 2003-779062 [73]; 2003-779122 [73]; 2003-812538 [76]; 2003-812539 [76]; 2003-812726 [76]; 2003-812730 [76]; 2003-875894 [81]; 2003-876927 [81]; 2003-898249 [82]; 2003-898588 [82]; 2003-900202 [82]; 2003-900671 [82]; 2003-900673 [82]; 2003-901057 [82]; 2004-035474 [03]; 2004-041344 [04]; 2004-053040 [05]; 2004-053462 [05]; 2004-053467 [05]; 2004-061267 [06]; 2004-061271 [06]; 2004-070750 [07]; 2004-081706 [08]; 2004-081707 [08]; 2004-081935 [08]; 2004-082483 [08]; 2004-090456 [09]; 2004-090517 [09]; 2004-108206 [11]; 2004-108207 [11]; 2004-108210 [11]; 2004-121988 [12]; 2004-121989 [12]; 2004-122030 [12]; 2004-122037 [12]; 2004-122080 [12]; 2004-122082 [12]; 2004-123380 [12]; 2004-130990 [13]; 2004-143267 [14]; 2004-168942 [16]; 2004-179665 [17]; 2004-180039 [17]; 2004-180659 [17]; 2004-180660 [17]; 2004-191379 [18]; 2004-191740 [18]; 2004-203286 [19]; 2004-212692 [20]; 2004-213931 [20]; 2004-213932 [20]; 2004-224146 [21]; 2004-225693 [21]; 2004-226190 [21]; 2004-268786 [25]; 2004-355290 [33]; 2004-355303 [33] WO 200281517 A UPAB: 20040621 NOVELTY - An isolated polypeptide, designated NOVX (NOV1 - 33), consisting of a mature form of one of 61 sequences (S1), given in specification, or its variant, where amino acid residue(s) in the variant differ from the mature form, provided that the variant differs in not more than 15 % of the amino acids from the sequence of the mature form, is new.

DETAILED DESCRIPTION - An isolated polypeptide, designated NOVX (NOV1 - 33), consisting of a mature form of a sequence (S1) chosen from 61 sequences given in specification, such as a sequence of 441, 993, 1197, 1247, 104, 363, 262, 374, 210, 322 or 339 amino acids or its variant, where amino acid residue(s) in the variant differ from the sequence of the mature form, provided that the variant differs in not more than 15 % of the amino acids from the sequence of mature form, is new.

INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated nucleic acid molecule (I) or its complement encoding NOVX polypeptide or a nucleic acid fragment encoding a portion of NOVX or its variant;
 - (2) a vector (II) comprising (I);
 - (3) a cell comprising (II);
 - (4) an antibody (III) with selectively binds to NOVX;
- (5) determining the presence or amount of NOVX in a sample comprising contacting the sample with (III) and determining the presence or amount of (III) bound to NOVX;
- (6) determining the presence or amount of (I) in a sample, comprising contacting the sample with a probe that binds to (I) and determining the presence or amount of probe bound to (I);
- (7) modulating the activity of NOVX, by contacting a cell sample comprising NOVX with a compound that binds to NOVX to modulate the activity of NOVX;
- (8) a kit comprising a pharmaceutical composition comprising NOVX, (I) or (III) in one or more containers; and
- (9) screening (V) for a modulator of activity or of latency or predisposition to a pathology associated with NOVX, comprising:

- (a) administering a test compound to a test animal which recombinantly expresses NOVX at increased risk for a pathology associated with NOVX;
- (b) measuring expression or activity of the protein in the test animal; and
- (c) comparing the activity of the protein in the test animal with the activity of the control animal, where a change in the activity of the polypeptide in a test animal relative to a control animal indicates that the test compound is a modulator.

ACTIVITY - Hepatotropic; Immunosuppressive; Cardiant; Hypertensive; Tranquilizer; Vulnerary; Virucide; Antibacterial; Protozoacide; Fungicide; Antiparasitic; Nootropic; Neuroprotective; Cerebroprotective; Antiparkinsonian; Anticonvulsant; Antiaddictive; Analgesic; Dermatological; Keratolytic; Antiseborrheic; Antirheumatic; Antiarthritic; Antiinflammatory; Anti-HIV; Cytostatic; Antiasthmatic; Antipsoriatic; Hypotensive; Osteopathic; Antiulcer; Anorectic; Antidiabetic; Antiallergic; Hemostatic; Neuroleptic; Antidepressant; Antiinfertility. No biological data is given.

MECHANISM OF ACTION - Gene therapy.

USE - NOVX polypeptides, nucleic acid (I) encoding the polypeptides, and an antibody (III) to the polypeptides, are useful for treating or preventing a NOVX-associated disorder in humans and for treating a syndrome associated with a human disease (NOVX-associated disorder). NOVX polypeptides and (I), are useful for determining the presence of or predisposition to a disease associated with altered levels of NOVX polypeptide and polynucleotide, by measuring the level of polypeptide expression or the amount of nucleic acid from a mammal and comparing it with another mammal not having or not predisposed to the disease. NOVX polypeptide is also useful for identifying an agent that binds to NOVX and a cell expressing NOVX is useful for identifying an agent that modulates the expression or activity of NOVX. (III) and a polypeptide having 95 % sequence identity to NOVX polypeptide are useful for treating a pathological state in a mammal. (III) is also useful for determining the presence or amount of NOVX in a sample (claimed). NOVX polypeptides, polynucleotides and antibodies specific for the polypeptides are useful for treating or preventing disorders or syndromes including trauma, viral, bacterial, fungal, protozoal, parasitic infections, Alzheimer's disease, stroke, hypercalceimia, Parkinson's disease, Huntington's disease, cerebral palsy, epilepsy, multiple sclerosis, addiction, anxiety, pain, actinic keratosis, acne, hair growth diseases, alopecia, pigmentation disorders, endocrine disorders, connective tissue disorders, rheumatoid-arthritis, inflammatory bowel disease, Crohn's disease, immunological disorders, acquired immunodeficiency syndrome (AIDS), cancers, leukemia, blood disorders, asthma, psoriasis, vascular disorders, hypertension, skin disorders, renal disorders, fibrosis disorders, bone diseases, neurologic diseases, brain and/or autoimmune disorders like encephalomyelitis, neurodegenerative disorders, immune disorders, hematopoietic disorders, muscle disorders, inflammation and wound repair, acute heart failure, hypotension, osteoporosis, angina pectoris, fertility, myocardial infarction, ulcers, obesity, systemic lupus erythematosus, allergy, diabetes, hemophilia, congenital adrenal hyperplasia, cirrhosis, polycystic kidney disease, psychotic

disorders, including anxiety, schizophrenia, depression, delirium, dementia, severe mental retardation and dyskinesias such as Huntington's disease and/or other pathologies and disorders. (I) is useful for expressing NOVX protein, to detect NOVX mRNA, or a genetic lesion in a NOVX gene and to modulate NOVX activity. NOVX sequences are also useful for identifying a cell or tissue type in a biological sample, to amplify DNA sequences from very small biological samples such as tissues e.g. hair or skin or body fluids in forensic biology and as primers and probes for use in identifying and/or cloning NOVX homologs in other cell types. NOVX protein is useful as an immunogen to generate antibodies which are useful for diagnostically monitoring protein levels and modulating NOVX activity. Cells comprising (I) are useful for producing non-human transgenic animals which are useful for studying the function and/or activity of NOVX protein and for identifying and/or evaluating modulators of NOVX protein activity. Dwg.0/0

ACCESSION NUMBER:

L28 ANSWER 2 OF 8 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

2002-590743 [63] WPIDS

DOC. NO. CPI:

TITLE:

Novel polypeptide, designated NOVX for treating or

preventing disorders or symptoms e.g. trauma, Alzheimer's disease, cancers, acquired

immunodeficiency syndrome, asthma and rheumatoid

arthritis.

C2002-167197

DERWENT CLASS: INVENTOR(S):

B04 D16

BALLINGER, R A; BOLDOG, F; BURGESS, C E; CASMAN, S

J; COLMAN, S D; EDINGER, S; ELLERMAN, K E; GANGOLLI, E A; GERLACH, V L; GUNTHER, E; GUO, X; GUSEV, V Y; LI, L; MALYANKAR, U M; MILLET, I;

PATTURAJAN, M; SHENOY, S G; SHIMKETS, R A;

SMITHSON, G; SPYTEK, K A; TCHERNEV, V T; ZERHUSEN,

B D; EDINGER, S R; ELLERMAN, K; GERLACH, V

(CURA-N) CURAGEN CORP; (BALL-I) BALLINGER R A; PATENT ASSIGNEE(S): (BOLD-I) BOLDOG F; (BURG-I) BURGESS C E; (CASM-I)

CASMAN S J; (COLM-I) COLMAN S D; (EDIN-I) EDINGER S R; (ELLE-I) ELLERMAN K; (GANG-I) GANGOLLI E A; (GERL-I) GERLACH V; (GUNT-I) GUNTHER E; (GUOX-I) GUO X; (GUSE-I) GUSEV V Y; (LILL-I) LI L; (MALY-I)

MALYANKAR U M; (MILL-I) MILLET I; (PATT-I) PATTURAJAN M; (SHEN-I) SHENOY S G; (SHIM-I)

SHIMKETS R A; (SMIT-I) SMITHSON G; (SPYT-I) SPYTEK K A; (TCHE-I) TCHERNEV V T; (ZERH-I) ZERHUSEN B D

COUNTRY COUNT: PATENT INFORMATION:

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WO 2002057452 A2 20020725 (200263) * EN 252

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KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA

UG US UZ VN YU ZA ZW

EP 1356047 A2 20031029 (200379) EN

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK

NL PT RO SE SI TR

US 2003236389 A1 20031225 (200408)

AU 2002243346 A1 20020730 (200427)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE			
WO 2002057452	A2	WO 2001-US49122	20011217			
EP 1356047	A2	EP 2001-989235	20011217			
		WO 2001-US49122	20011217			
US 2003236389	Al Provisional	US 2000-256025P	20001215			
	Provisional	US 2001-265163P	20010130			
	Provisional	US 2001-272929P	20010302			
	Provisional	US 2001-274864P	20010309			
	Provisional	US 2001-276688P	20010316			
	Provisional	US 2001-277880P	20010322			
	Provisional	US 2001-286409P	20010425			
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	Provisional	US 2001-315600P	20010829			
		US 2001-23634	20011214			
AU 2002243346	A1	AU 2002-243346	20011217			

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1356047 AU 2002243340		WO 2002057452 WO 2002057452
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AN 2002-590743	[63] WPIDS	

AB WO 200257452 A UPAB: 20021001

NOVELTY - An isolated polypeptide (I), NOVX (NOVX 1-9), comprising a sequence selected from a sequence (S1) of 709, 626, 709, 365, 465, 466, 467, 219, 270, 447, 234, 452, 452, 404 or 1080 amino acids fully defined in the specification, a variant of S1, a mature form of S1, or a variant of the mature form of S1, is new.

DETAILED DESCRIPTION - (I) comprises S1, a variant of S1, a mature form of S1, or a variant of the mature form of S1, where one or more amino acids in the variant of S1 or the variant of the mature form of S1, differs from S1 or the mature form of S1 by not more than 15% of the amino acid residues.

INDEPENDENT CLAIMS are also included for:

- (1) an isolated nucleic acid molecule (II) comprising a nucleic acid sequence encoding (I), comprising a nucleic acid fragment encoding at least a portion of (I) or its variant, or a nucleic acid molecule comprising the complement of (II);
 - (2) a vector (III) comprising (II);
 - (3) a cell (IV) comprising (III);
 - (4) an antibody (V) that binds immunospecifically to (I);
- (5) determining (M1) the presence or amount of (II) in a sample involves contacting the sample with a probe that binds to (II), and determining the presence or amount of probe bound to (II) and determining the presence or amount of (II) in the sample;
- (6) identifying an agent that modulates the expression or activity of (I);
- (7) modulating an activity of (I), by contacting a cell sample expressing (I) with a compound that binds to (I);
- (8) a pharmaceutical composition (VI) comprising (I), (II) or (V) and a carrier;
 - (9) a kit comprising (VI) in one or more containers (VI);
- (10) screening (M2) a modulator of activity or of latency or predisposition to a NOVX-associated disorder involves administering a test compound to a test animal at increased risk for a NOVX-associated disorder, where the test animal recombinantly expresses (I), measuring the activity of (I) in the test animal after administering the compound and comparing the activity of protein in the test animal with the activity of (I) in a control animal not administered with (I), where a change in the activity of (I) in the test animal relative to the control animal indicates that the test compound is a modulator of latency of or predisposition to a NOVX-associated disorder; and
- (11) treating a pathological state in a mammal, by administering to the mammal a polypeptide with a sequence at least 95% identical to a polypeptide comprising S1, or its biologically active fragment.

ACTIVITY - Tranquilizer; Vulnerary; Nootropic; Neuroprotective; Anticonvulsant; Antiparkinsonian; Analgesic; Osteopathic; Antiarthritic; Antirheumatic; Antiinflammatory; Anti-HIV; Cytostatic; Antiasthmatic; Hypotensive; Immunosuppressive; Antidiabetic; Anorectic; Antiulcer.

MECHANISM OF ACTION - Gene therapy; Vaccine. No suitable data given.

USE - (I) is useful for identifying an agent that binds to (I) by contacting (I) with the agent, and determining whether the agent binds to (I). (I) or (II) is useful for determining the presence or predisposition to a disease associated with altered levels of (I) or (II) in a first mammalian subject. The method comprises measuring the level of expression of (I) or amount of (II) in a sample from the first mammalian subject, and comparing it to the amount of polypeptide or nucleic acid present in a control sample from a second mammalian subject known not to have, or not to be predisposed to, the disease, where an alteration in the expression level of (I) or level of (II) in the first subject when compared to the control sample indicates the presence of or predisposition to the disease. (I), (II) and (V) are useful for treating or preventing NOVX-associated disorder in the subject preferably human. (I), (II) or (V) is useful as a therapeutic in the manufacture of a medicament for treating a syndrome associated with a human disease selected

from NOVX-associated disorder. (V) is useful for treating a pathological state in a mammal. (V) is useful for determining the presence or amount of (I) in a sample by determining the presence or amount of (V) bound to (I) (all claimed). (I), (II) and (V) are useful for treating or preventing disorders or syndromes e.g. trauma, viral/parasitic/bacterial infections, Alzheimer's disease, Huntington's disease, Parkinson's disease, behavioral disorders, anxiety, addiction, pain, hair growth diseases, alopecia, pigmentation disorder, inflammatory disorders such as osteo- and rheumatoid arthritis, inflammatory bowel disease, Crohn's disease, acquired immunodeficiency syndrome (AIDS), cancers such as colon cancer, adenocarcinoma; asthma, hypertension, autoimmune disease, diabetes, obesity, graft versus host disease, ulcer, bulimia, anorexia or dementia. (I), (II) or (V) is useful in screening assays, detection assays (e.g. chromosomal mapping, tissue typing, forensic biology), predictive medicine (e.g. diagnostic assays, prognostic assays, monitoring clinical trials and pharmacogenomic), and in methods of treatment (e.g. therapeutic and prophylactic). (I) is useful as immunogen to produce antibodies immunospecific for (I), to screen for potential agonist and antagonist compounds, and as bait protein in a two-hybrid or three-hybrid assay. (II) is useful in gene therapy, to express (I), to detect NOVX mRNA or a genetic lesion in a NOVX gene, and to modulate NOVX activity. (IV) is useful for producing non-human transgenic animals. (V) is useful for isolating, and purifying (I) and to monitor protein levels in tissue as part of a clinical testing procedure. (V) is useful for detecting and isolating NOVX protein and modulating NOVX activity. Dwg.0/0

L28 ANSWER 3 OF 8 ACCESSION NUMBER: CROSS REFERENCE:

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WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
   2002-590741 [63]
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2004-268786 [25]; 2004-355290 [33]; 2004-355303
[33]
N2002-468725
C2002-167195
Novel isolated polypeptide, designated NOVX, useful
for treating or preventing in NOVX-associated
disorders e.g. cardiomyopathy, atherosclerosis,
diabetes, cancer, allergy, asthma, Crohn's disease.
B04 D16 D21 P14 S03
ALSOBROOK, J P; BOLDOG, F L; BURGESS, C E; CASMAN,
S J; EDINGER, S; ELLERMAN, K; GANGOLLI, E A;
GERLACH, V; GROSSE, W M; GUO, X; LEPLEY, D M; LI,
L; MACDOUGALL, J R; MALYANKAR, U M; MILLER, C E;
MILLET, I; MISHRA, V; PADIGARU, M; PATTURAJAN, M;
RASTELLI, L; RIEGER, D; SHENOY, S; SPYTEK, K A;
STONE, D J; TCHERNEV, V T; VERNET, C A M; ZERHUSEN,
B D; EDINGER, S R; RIEGER, D K; SHENOY, S G;
GROSSE, M
(CURA-N) CURAGEN CORP; (ALSO-I) ALSOBROOK J P;
(BOLD-I) BOLDOG F L; (BURG-I) BURGESS C E; (CASM-I)
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Searcher : Shears 571-272-2528

CASMAN S J; (EDIN-I) EDINGER S R; (ELLE-I) ELLERMAN

DOC. NO. NON-CPI:

DOC. NO. CPI:

DERWENT CLASS:

PATENT ASSIGNEE(S):

INVENTOR(S):

TITLE:

K; (GANG-I) GANGOLLI E A; (GERL-I) GERLACH V; (GROS-I) GROSSE W M; (GUOX-I) GUO X; (LEPL-I) LEPLEY D M; (LILL-I) LI L; (MACD-I) MACDOUGALL J R; (MALY-I) MALYANKAR U M; (MILL-I) MILLER C E; (MILL-I) MILLET I; (MISH-I) MISHRA V; (PADI-I) PADIGARU M; (PATT-I) PATTURAJAN M; (RAST-I) RASTELLI L; (RIEG-I) RIEGER D K; (SHEN-I) SHENOY S G; (SPYT-I) SPYTEK K A; (STON-I) STONE D J; (TCHE-I) TCHERNEV V T; (VERN-I) VERNET C A M; (ZERH-I) ZERHUSEN B D; (GROS-I) GROSSE M

COUNTRY COUNT:
PATENT INFORMATION:

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002057450	A2	WO 2001-US48922	20011129
US 2004029222	Al Provisional	US 2000-253834P	20001129
	Provisional	US 2000-250926P	20001130
	Provisional	US 2001-264180P	20010125
	Provisional	US 2001-313656P	20010820
	Provisional	US 2001-327456P	20011005
	Cont of	US 2001-995514	20011128
		US 2002-218779	20020814
US 2004029116	Al Provisional	US 2001-274194P	20010308
	Provisional	US 2001-313656P	20010820
	Provisional	US 2001-327456P	20011005
		US 2002-87684	20020301
AU 2002246696	A1	AU 2002-246696	20011129

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002246696	Al Based on	WO 2002057450
PRIORITY APPLN. INFO:	US 2001-995514 2000-253834P 2000-250926P 2001-264180P 2001-313656P	20011128; US 20001129; US 20001130; US 20010125; US 20010820; US

20011005; US

2001-327456P

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AΒ
     WO 200257450 A UPAB: 20040525
     NOVELTY - An isolated polypeptide (I), termed NOVX (NOV1-12)
     comprising a 933, 933, 2281, 855, 2300, 1446, 403, 442, 272, 331,
     355, 668, 963, 238, 238 or 1907 residue amino acid sequence (S3),
     given in the specification, a variant of S1, a mature form of S1
     (its variant), is new.
          DETAILED DESCRIPTION - An isolated polypeptide (I), termed NOVX
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(NOV1-12) comprising a 933, 933, 2281, 855, 2300, 1446, 403, 442, 272, 331, 355, 668, 963, 238, 238 or 1907 residue amino acid sequence (S3), given in the specification, a variant of S1, a mature form of S1 (its variant), is new. (I) comprises S1, a variant of S1, a mature form of S1, or a variant of the mature form of S1, where one or more amino acids in the variant of S1 or the variant of the mature form of S1, differs from S1 or the mature form of S1 by not more than 15 % of the amino acid residues.

INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated nucleic acid molecule (II) comprising a nucleic acid sequence encoding (I), comprising a nucleic acid fragment encoding at least a portion of (I) or its variant, or a nucleic acid molecule comprising the complement;
 - (2) a vector (III) comprising (II);
 - (3) a cell (IV) comprising (III);
 - (4) an antibody (V) that binds immunospecifically to (I);
- (5) determining (M1) the presence or amount of (II) in a sample;
- (6) identifying an agent that modulates the expression or activity of (I);
- (7) modulating an activity of (I), by contacting a cell sample expressing (I) with a compound that binds to (I);
- (8) a pharmaceutical composition (VI) comprising (I), (II) or (V);
 - (9) a kit comprising (VI) in one or more containers; and
- (10) treating a pathological state in a mammal, by administering to the mammal a polypeptide having an amino acid sequence at least 95 % identical to a polypeptide comprising S1, or its biologically active fragment.

ACTIVITY - Neuroprotective; Nootropic; Antiparkinsonian; Hypotensive; Hypertensive; Hemostatic; Cardiant; Antianginal; Dermatological; Immunosuppressive; Antiinflammatory; Virucide; Antibacterial; Antiparasitic; Antiallergic; Antiasthmatic; Antirheumatic; Antiarthritic; Anti-HIV (human immunodeficiency virus); Vulnerary; Anorectic; Antidiabetic; Immunomodulator; Antipsoriatic; Nephrotropic; Kerolytic; Antiulcer; Cerebroprotective; Anticonvulsant; Antiinfertility; Antimanic; Antidepressant; Metabolic; Cytostatic; Tranquilizer; Analgesic.

MECHANISM OF ACTION - Gene therapy; Vaccine.

No biological data is given.

USE - (I) is useful for identifying an agent that binds to (I), by contacting (I) with the agent, and determining if the agent binds to (I), where the agent is a cellular receptor or downstream effector. (I) and (II) are useful for determining the presence or predisposition to a disease associated with altered levels of (I) or (II), especially cancer, in a first mammalian subject. The method comprises measuring the level of expression of (I) or amount of (II) in a sample from the first mammalian subject, and comparing it to the amount of polypeptide or nucleic acid present in a control sample from a second mammalian subject known not to have, or not to be predisposed to, the disease, where an alteration in the expression level of (I) or (II) in the first subject when compared to the control sample indicates the presence of or predisposition to the disease. (I), (II) and (V) are useful for treating or preventing NOVX-associated disorder in the subject preferably human, where the disorder is cardiomyopathy, atherosclerosis, diabetes or a disorder

related to cell signal processing and metabolic pathway modulation. (V) is useful for determining the presence or amount of (I) in a sample by determining the presence or amount of (V) bound to (I), and for treating a pathological state in a mammal. (All claimed). (I), (II) and (V) are useful for treating or preventing Alzheimer's disease, Parkinson's disorder, hypertension, hypotension, idiopathic thrombocytopenic purpura, hemophilia, heart failure, angina pectoris, myocardial infarction, scleroderma, aortic stenosis, subaortic stenosis, transplantation, autoimmune disease, lupus erythematosus, viral, bacterial, parasitic infections, autoimmune disease, allergies, graft versus host disease, asthma, adult respiratory distress syndrome (ARDS), inflammation, rheumatoid arthritis, multiple sclerosis, acquired immunodeficiency syndrome (AIDS), wound repair, obesity, diabetes, endocrine disorders, anorexia, bulimia, glomerulonephritis, polycystic kidney disease, hypercalceimia, Lesch-Nyhan syndrome, trauma, Crohn's disease, cachexia, psoriasis, actinic keratosis, urinary retention, ulcers, stroke, Huntington's disease, epilepsy, addition, anxiety, pain, stroke, fertility, schizophrenia, manic depression, dementia, Gilles de la Tourette syndrome and cancers. (I) and (II) are useful for screening for molecules, which inhibit or enhance NOVX activity or function, and as targets for the identification of small molecules that modulate or inhibit, e.g. neurogenesis, cell differentiation, cell proliferation, hematopoiesis, wound healing or angiogenesis. (II) is useful in screening assays, detection assays (e.g. chromosomal mapping, tissue typing, forensic biology), predictive medicine (e.g. diagnostic assays, prognostic assays, monitoring clinical trials and pharmacogenomic), and in methods of treatment (e.g. therapeutic and prophylactic). (I) is useful as immunogen to produce antibodies immunospecific for (I), to screen for potential agonist and antagonist compounds, and as bait protein in a two-hybrid or three-hybrid assay. (II) is useful in gene therapy, to express (I), to detect NOVX mRNA or a genetic lesion in NOVX gene, and to modulate NOVX activity. (IV) is useful for producing non-human transgenic animals which are useful for studying the function and/or activity of NOVX protein and for identifying and/or evaluating modulators of NOVX protein activity. (V) is useful for isolating, and purifying (I) and to monitor protein levels in tissue as part of a clinical testing procedure, e.g. for determining the efficacy of treatment regimen. Dwg.0/0

L28 ANSWER 4 OF 8 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER:

2002-583619 [62]

CROSS REFERENCE:

2004-247703 [23] N2002-462802

DOC. NO. NON-CPI: DOC. NO. CPI:

TITLE:

C2002-165032

Novel polypeptides and nucleic acids homologous to transmembrane receptor, thymosin, neuromodulin-like family of proteins for diagnosing, treating cancer, atherosclerosis, neurological, skin and autoimmune

disorders.

DERWENT CLASS: INVENTOR(S):

B04 D16 J04 S03

ALSOBROOK, J P; ANDERSON, D; BOLDOG, F; BURGESS, C E; EDINGER, S; EISEN, A; ELLERMAN, K; GORMAN, L; GROSSE, W M; GUO, X; KEKUDA, R; LEPLEY, D M; LI, L;

LIU, X; MALYANKAR, U; MILLER, C E; PADIGARU, M; PATTURAJAN, M; ROTHENBERG, M; SCIORE, P; SHENOY, S; SPYTEK, K A; STONE, D; TAUPIER, R J; TCHERNEV, V T; VERNET, C A M

PATENT ASSIGNEE(S):

(CURA-N) CURAGEN CORP 100

COUNTRY COUNT:

PATENT INFORMATION:

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		MW	MZ	NL	ΟA	PT	SD	SE	\mathtt{SL}	SZ	TR	TZ	UG	ZM	zw						
	W:	ΑE	ΑG	AL	AM	ΑT	ΑU	ΑZ	BA	вв	BG	BR	BY	BZ	CA	CH	CN	CO	CR	CÜ	CZ
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		KE	KG	ΚP	KR	ΚZ	LC	LK	LR	LS	LT	LU	LV	MA	MD	MG	MK	MN	MW	ΜX	MZ
		ИО	ΝZ	MO	PH	PL	PT	RO	RU	SD	SE	SG	SI	SK	\mathtt{SL}	TJ	TM	TR	TT	TZ	UA
		UG	US	UZ	VN	YU	ZA	ZW													
EΡ	138	3893	3		A2	200	0401	128	(20	04(09)	EN	1								
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APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002053742 EP 1383893	A2 A2	WO 2002-US375 EP 2002-707409	20020107
AU 2002241820	A1	WO 2002-US375 AU 2002-241820	20020107 20020107

FILING DETAILS:

PATENT NO	KIND	PATENT NO
	A2 Based on A1 Based on	WO 2002053742
A0 2002241620	Al based on	WO 2002053742
PRIORITY APPLN. INFO:	· - · · · · - · - ·	20020104; US
	2001-260018P	20010105; US
	2001-260360P	20010108; US
	2001-272411P	20010228; US
	2001-272817P	20010302; US
	2001-303231P	20010705; US
	2001-305060P	20010712; US
	2001-318405P	20010910; US
	2001-318700P	20010912
AN 2002-583619 [62]	WPIDS	

2004-247703 [23] CR

AB WO 200253742 A UPAB: 20040426

> NOVELTY - An isolated NOVX (NOV1-14) polypeptide comprising a mature form of a sequence chosen from 24 sequences (S1) given in specification such as 3600, 908, 3597, 1640, 400, 175, 354, 1723, 1681 and 241 amino acids (aa), or its variant where one/more aa's differs to give no more than 15% variation, is new.

> > Searcher :

Shears

571-272-2528

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- (1) an isolated nucleic acid molecule (I) or its complement encoding NOVX or a nucleic acid fragment encoding a portion of NOVX or its variant;
 - (2) a vector (II) comprising (I);
 - (3) a cell comprising (II);
- (4) an antibody (III) which selectively binds to NOVX polypeptide;
- (5) determining the presence or amount of (I) in a sample, by introducing the sample to a probe that binds to (I) and determining the presence of probe bound to (I);
- (6) modulating the activity of NOVX polypeptide, by contacting a cell sample comprising NOVX with a compound that binds to NOVX to modulate the activity of NOVX;
- (7) a pharmaceutical composition (IV) comprising NOVX, (I) or (III); and
- (8) a kit comprising (IV) in one or more containers. ACTIVITY - Cytostatic; Nootropic; Neuroprotective; Cerebroprotective; Anticonvulsant; Tranquilizer; Antiparkinsonian; Hypotensive; Antiasthmatic; Antidiabetic; Antipsoriatic; Antiinflammatory; Immunosuppressive; Analgesic; Antiinfertility; Anorectic; Antiatherosclerotic; Dermatological; Antiulcer; Gynecological; Antibacterial; Antiarthritic; Hepatotropic; Antithyroid; Uropathic; Antiaddictive.

MECHANISM OF ACTION - Gene therapy.

No suitable data given.

USE - NOVX polypeptides and polynucleotides are useful for treating or preventing a NOVX-associated disorder, especially cardiomyopathy, atherosclerosis or a disorder related to cell signal processing and metabolic pathway modulation in humans. NOVX polypeptides and (I) are useful for determining the presence of or predisposition to a disease associated with altered levels of NOVX polypeptide and polynucleotide, especially cancer, by measuring the level of polypeptide expression or the amount of nucleic acid from a mammal and comparing it with another mammal not having or not predisposed to the disease. NOVX polypeptide is also useful for identifying an agent, preferably a cellular receptor or downstream effector, that binds to NOVX and an agent that modulates the expression or activity of the NOVX polypeptide. (III) is useful for treating diabetes. (III) and a polypeptide with 95% sequence identity to NOVX polypeptide are useful for treating a pathological state in a mammal. (III) is also useful for determining the presence or amount of NOVX in a sample (claimed). NOVX nucleic acid molecules, polypeptides and antibodies are useful in therapeutic and diagnostic applications in neurological disorders (Alzheimer's, Parkinson's disease), cancers (tuberous sclerosis, colorectal cancer), hypercalcemia, pain, diabetes, fertility, immune diseases (allergy, autoimmune disease), cardiovascular disease (atherosclerosis, hypertension) obesity, ulcers, asthma, protoporphyria, psoriasis, Wolman disease, myasthenia gravis, endometriosis, pancreatitis, alopecia, endocrine disorders, tonsillitis, cirrhosis, glomerular endotheliosis, bacterial infections, various forms of arthritis, scleroderma, reproductive disorders, thyroiditis, incontinence, addiction, and polycystic kidney disease. NOVX nucleic acids and polypeptides are useful to

screen for molecules which inhibit or enhance NOVX activity or function and are also useful as targets for the identification of small molecules, that modulate or inhibit e.g. neurogenesis, cell differentiation, motility, proliferation, hematopoiesis, wound healing and angiogenesis. (I) is useful for expressing NOVX protein, to detect NOVX mRNA, or a genetic lesion in a NOVX gene and to modulate NOVX activity. NOVX sequences are also useful for identifying a cell or tissue type in a biological sample, to amplify DNA sequences from very small biological samples such as tissues e.g. hair or skin or body fluids in forensic biology and as primers and probes for use in identifying and/or cloning NOVX homologs in other cell types. NOVX protein is useful as an immunogen to generate antibodies which are useful for diagnostically monitoring protein levels and modulate NOVX activity. Cells comprising (I) are useful for producing non-human transgenic animals which are useful for studying the function and/or activity of NOVX protein and for identifying and/or evaluating modulators of NOVX protein activity. Dwq.0/0

L28 ANSWER 5 OF 8 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 2002-590434 [63]

WPIDS

CROSS REFERENCE:

2003-901642 [82]

DOC. NO. CPI:

C2002-166898

TITLE:

Cytoplasmic, nuclear, membrane bound and secreted polypeptides and nucleic acids encoding the polypeptides for diagnosing and treating e.g. cancer, Alzheimer's disease, cardiomyopathy, metabolic disease and diabetes.

DERWENT CLASS:

B04 D16

INVENTOR(S):

BURGESS, C E; EDINGER, S; ELLERMAN, K; FERNANDES, E R; GANGOLLI, E A; GERLACH, V; GORMAN, L; GUNTHER, E; GUO, X; KEKUDA, R; MACDOUGALL, J R; MALYANKAR, U M; MILLET, I; PADIGARU, M; PATTURAJAN, M; PEYMAN, J A; SHIMKETS, R A; SMITHSON, G; SPYTEK, K A; STONE, D J; TAUPIER, R J; ZERHUSEN, B D

PATENT ASSIGNEE(S):

COUNTRY COUNT:

(CURA-N) CURAGEN CORP 97

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2002033087 A2 20020425 (200263)* EN 305

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG

US UZ VN YU ZA ZW AU 2002016637 A 20020429 (200263)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002033087	A2	WO 2001-US32496	20011017

AU 2002016637 A

AU 2002-16637

20011017

FILING DETAILS:

AΒ

PATENT NO	KIND	PATENT NO
AU 20020166	37 A Based on	WO 2002033087
PRIORITY APPLN. AN 2002-590434 CR 2003-901642	2000-241058P 2000-241063P 2000-241243P 2000-242152P 2000-242611P 2000-242612P 2000-242880P 2000-242881P 2000-259028P 2001-269813P 2001-286324P 2001-294108P 2001-303698P [63] WPIDS	20001017; US 20001017; US 20001017; US 20001017; US 20001020; US 20001023; US 20001023; US 20001023; US 20001024; US 20001024; US 20001029; US 20010220; US 20010425; US 20010529; US
CR 2003-901642	[82]	

WO 200233087 A UPAB: 20031223

NOVELTY - An isolated NOVX (NOV1-10) polypeptide, consisting of a mature form of a sequence (S1) chosen from 14 sequences given in the specification such as 986, 791, 856, 952, 1492, or 326 amino acids (AA) (or its fragment, variant, where any AA in the mature form is changed to a different AA, provided that not more than 15% of the AA residues in the sequence of the mature form are so changed), is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated nucleic acid molecule (I) or its complement encoding NOVX, or a nucleic acid fragment encoding a portion of NOVX or its variant, where any amino acid of the chosen sequence is changed to different amino acid, provided that not more than 15% of the amino acid residues in the sequence are so changed;
 - (2) a vector (II) comprising (I);
 - (3) a cell comprising (II);
 - (4) an antibody (III) which selectively binds to NOVX;
- (5) determining (M) the presence or amount of (I) in a sample, by introducing the sample to a probe that binds to (I) and determining the presence of probe bound to (I);
- (6) modulating the activity of NOVX, by contacting a cell sample expressing the polypeptide with a compound that binds to NOVX to modulate the activity of NOVX;
- (7) a pharmaceutical composition (IV) comprising NOVX, (I) or (III); and
- (8) a kit comprising (IV) in one or more containers. ACTIVITY - Cytostatic; Neuroprotective; Nootropic; Anticonvulsant; Tranquilizer; Antiparkinsonian; Analgesic; Cerebroprotective; Immunosuppressive; Antiallergic; Antiasthmatic; Gynecological; Dermatological; Antiinflammatory; Antipsoriatic;

Searcher :

Anti-HIV; Antiatherosclerotic; Hepatotropic; Antirheumatic; Antiarthritic; Antidiabetic; Anorectic; Nephrotropic; Antidiarrheic; Osteopathic; Antiinfertility; Virucide; Antibacterial; Antiparasitic; Hemostatic.

MECHANISM OF ACTION - Gene therapy. No supporting data is given.

USE - NOVX polypeptide and (I) are useful for treating or preventing a NOVX-associated disorder, such as cardiomyopathy, atherosclerosis, disorder related to cell signal processing and metabolic pathway modulation in humans. NOVX polypeptides and (I) are useful for determining the presence of or predisposition to a disease associated with altered levels of NOVX polypeptide or polynucleotide, in particular cancer, by measuring the level of polypeptide expression or the amount of nucleic acid from a mammal and comparing it with another mammal not having or not predisposed to the disease. NOVX polypeptide is also useful for identifying an agent that binds to NOVX, where the agent is a cellular receptor or a downstream receptor, or an agent that modulates the expression or activity of the polypeptide.

(III) and a polypeptide with 95% sequence identity to NOVX polypeptide are useful for treating a pathological state in a mammal. (III) is also useful for treating or preventing a NOVX-associated disorder, in particular diabetes and disorder related to cell signal processing and metabolic pathway modulation in humans and also for determining the presence or amount of NOVX in a sample.

(M) is useful for determining the presence or amount of (I) in a sample, or as a marker for cancerous cell or tissue type (all claimed).

NOVX polypeptides, nucleic acids and antibodies are useful for treating or preventing disorders or syndromes including breast cancer, Alzheimer's disease, epilepsy, Huntington's disease, anxiety, behavioral disorders, multiple sclerosis, myasthenia gravis, neurodegeneration, Parkinson's disease, pain, stroke, autoimmune disease, allergies, addiction, asthma, endometriosis, graft versus host disease, systemic lupus erythematosus, scleroderma, transplantation, psoriasis, Crohn's disease, HIV infection, atherosclerosis, cirrhosis, rheumatoid arthritis, diabetes, thrombocytopenia, bleeding disorders, metabolic disorders, obesity, glucose transport defect, glomerulonephritis, hypercalcemia, polycystic kidney disease, pancreatitis, renal tubular acidosis, skin disorders, congenital diarrhea, respiratory disease, gastro-intestinal diseases, muscle, bone, joint and skeletal disorders, hematopoietic disorders, urinary system disorders, osteoporosis, dental disease and infection, growth and reproductive disorders, hypogonadism, fertility, and/or other pathologies and disorders, viral, bacterial, parasitic infections.

NOVX nucleic acids and polypeptides are useful to screen for molecules which inhibit or enhance NOVX activity or function and are also useful as targets for the identification of small molecules, that modulate or inhibit e.g. neurogenesis, cell differentiation, proliferation, hematopoiesis, wound healing and angiogenesis.

(I) is useful for expressing NOVX protein, to detect NOVX mRNA, or a genetic lesion in a NOVX gene and to modulate NOVX activity. NOVX sequences are also useful for identifying a cell or tissue type in a biological sample, to amplify DNA sequences from very small

biological samples such as tissues e.g. hair or skin or body fluids in forensic biology and as primers and probes for use in identifying and/or cloning NOVX homologs in other cell types. NOVX protein is useful as an immunogen to generate antibodies which are useful for diagnostically monitoring protein levels and modulating NOVX activity. Cells comprising (I) are useful for producing non-human transgenic animals which are useful for studying the function and/or activity of NOVX protein and for identifying and/or evaluating modulators of NOVX protein activity. Dwg.0/0

L28 ANSWER 6 OF 8 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER:

2002-499860 [53] WPIDS C2002-141494

DOC. NO. CPI: TITLE:

Novel isolated NOVX polypeptides and

polynucleotides homologous to attractin,

plexin, papin-like family of proteins, useful for treating atherosclerosis, diabetes, cancer, Alzheimer's disease, hemophilia and stroke.

DERWENT CLASS:

B04 D16

INVENTOR(S):

ALSOBROOK, J P; BURGESS, C E; ELLERMAN, K; GERLACH, V L; GROSSE, W M; GUNTHER, E; KEKUDA, R; LEACH, M

D; LEPLEY, D M; MACDOUGALL, J R; MILLET, I;

PADIGARU, M; SHIMKETS, R A; SMITHSON, G; SPYTEK, K

A; STONE, D

PATENT ASSIGNEE(S):

(CURA-N) CURAGEN CORP; (ALSO-I) ALSOBROOK J P; (BURG-I) BURGESS C E; (ELLE-I) ELLERMAN K; (GERL-I) GERLACH V L; (GROS-I) GROSSE W M; (GUNT-I) GUNTHER E; (KEKU-I) KEKUDA R; (LEAC-I) LEACH M D; (LEPL-I) LEPLEY D M; (MACD-I) MACDOUGALL J R; (MILL-I)

MILLET I; (PADI-I) PADIGARU M; (SHIM-I) SHIMKETS R
A; (SMIT-I) SMITHSON G; (SPYT-I) SPYTEK K A;

(STON-I) STONE D

COUNTRY COUNT: PATENT INFORMATION:

98

PATENT NO KIND DATE WEEK LA PO

WO 2002026826 A2 20020404 (200253)* EN 308

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC

MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP

KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ

NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG

US UZ VN YU ZA ZW

AU 2002011818 A 20020408 (200253)

EP 1373313 A2 20040102 (200409) EN

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK

NL PT RO SE SI TR

US 2004043926 A1 20040304 (200417)

APPLICATION DETAILS:

PATENT NO KIND APPLICATION DATE

WO AU EP	2002026826 2002011818 1373313	A2 A A2		WO AU EP	2001-US42336 2002-11818 2001-979901 2001-US42336	20010927 20010927 20010927
US	2004043926	A1	Provisional Provisional Provisional Provisional Provisional Provisional Provisional	WO US US US US US US	2001-US42336 2000-235631P 2000-235633P 2000-235808P 2000-236064P 2000-236065P 2000-236066P 2000-236135P	20010927 20000927 20000927 20000927 20000927 20000927 20000927 20000928
			Provisional Provisional Provisional Provisional Provisional Provisional Provisional	US US US US US US US	2000-237434P 2000-238321P 2000-238396P 2000-238399P 2001-276667P 2001-294823P 2001-304868P 2001-964956	20001003 20001005 20001006 20001006 20010316 20010531 20010712 20010926

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 20020118 EP 1373313	18 A Based on A2 Based on	WO 2002026826 WO 2002026826
PRIORITY APPLN.	INFO: US 2001-964956 2000-235631P 2000-235633P 2000-235808P 2000-236064P 2000-236066P 2000-236135P 2000-237434P 2000-238321P 2000-238396P 2000-238399P 2001-276667P 2001-294823P 2001-304868P	20010926; US 20000927; US 20000927; US 20000927; US 20000927; US 20000927; US 20000927; US 20000928; US 20001003; US 20001005; US 20001006; US 20010316; US 20010531; US 20010712
AN 2002-499860	[53] WPIDS	

AB WO 200226826 A UPAB: 20040112

NOVELTY - An isolated NOVX polypeptide (I) comprising an amino acid sequence of mature form of sequence or amino sequence (S) of 841, 837, 1185, 2066, 2053, 1896, 480, 879, 442, 2814 or 2811 amino acids fully defined in specification or a variant of the above that differs not more than 15% of amino acid residues, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) an isolated nucleic acid molecule (II) comprising a nucleic acid sequence encoding (I); a nucleic acid fragment encoding a portion of a polypeptide comprising (S1) or its variant that differs not more than 15% of amino acid residues and a nucleic acid molecule comprising the complement of the above;

- (2) a vector (III) comprising (II);
- (3) an antibody (IV) that binds specifically to (I);
- (4) a cell (V) comprising (III);
- (5) modulating the activity of (I) comprising contacting a cell sample expressing (I) with a compound that binds to (I);
- (6) a pharmaceutical composition (VI) comprising (I), (II) or (IV); and
 - (7) a kit comprising (VI), in one or more containers.

ACTIVITY - Cytostatic; Uropathic, Gynecological; Hepatotropic; Antiinflammatory; Antiinfertility; Antilipemic; Antiarteriosclerotic; Hypotensive; Dermatological; Hemostatic; Anorectic; Antidiabetic; Immunosuppressive; Antiasthmatic; Antipsoriatic; Antiallergic; Nootropic; Neuroprotective; Cerebroprotective; Antiparkinsonian; Anticonvulsant; Tranquilizer; Analgesic; Neuroleptic; Antialcoholic; Nephrotropic. No supporting data given.

MECHANISM OF ACTION - Modulator of expression of NOVX polypeptide; Gene therapy; Vaccine.

No supporting data given.

USE - (I), (II) or (IV) is useful in treating or preventing a NOVX-associated disorder which is cardiomyopathy, atherosclerosis and diabetes in a human, where the disorder is related to cell signal processing and metabolic pathway modulation. (IV) is useful for determining the presence or amount of (I) in a sample. Fragment of (I) is useful as probe for determining the presence or amount of (II) in the sample. The presence or amount of (II) is useful as a marker for cancerous cell or tissue type. (I) is useful for identifying an agent which is cellular receptor or downstream effector. (I) is also useful for identifying an agent that modulates the expression or activity of (I). (I) or (II) is useful for determining the presence or predisposition to a disease associated with altered levels of (I) or (II), especially cancer. Polypeptide 95% identical to (I) or its biologically active fragment, or (IV) is useful for treating a pathological state in a mammal (claimed). (I) is useful as immunogen to produce (IV), and as vaccines and is also useful in screening for potential agonist and antagonist compounds. (I) is useful for screening for a modulator of activity or of latency or predisposition to disorders. Fragments of (I) (cDNA) sequence useful in chromosome mapping, tissue typing and in forensic identification of a biological sample. Probes obtained from (II) is useful for detecting transcripts or genomic sequences encoding the same or homologous proteins and identifying cells or tissues that misexpress an NOVX protein. (II) is useful in gene therapy, and in purification of (I). (II) is useful to express NOVX protein, to detect NOVX mRNA or a genetic lesion in an NOVX gene and to modulate NOVX activity. (I) or (II) is useful for prognostic (predictive) assays, for prophylactically treating an individual. Agent that modulate NOVX expression is useful for preventing or treating diseases. (I), (II) or (III) is useful in treating diseases such as hypertension, congenital heart defects, aortic stenosis, obesity, infectious disease, anorexia, cancer, Alzheimer's disease, Parkinson's disorders, neurodegenerative disorders, hemophilia, dyslipidemias, hematopoietic diseases, scleroderma, fertility, idiopathic thrombocytopenic purpura, graft versus host diseases, Crohn's disease, multiple sclerosis, cirrhosis, autoimmune disease, systemic lupus erythematosus, asthma, arthritis, psoriasis, allergy, stroke, anxiety, Lesch-Nyhan syndrome, schizophrenia, cerebellar

ataxia, pain and alcoholism. (IV) is useful to detect and isolate NOVX proteins and modulate NOVX activity. (V) is useful to produce non-human transgenic animals which is useful for studying the function and/or activity of NOVX protein and for identifying and/or evaluating modulators of NOVX protein activity. Dwq.0/0

L28 ANSWER 7 OF 8 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN ACCESSION NUMBER: 2001-626379 [72] WPIDS

DOC. NO. CPI:

C2001-186636

TITLE:

New G protein-coupled receptor related polypeptides

and polynucleotides for diagnosis, prevention and treatment of metabolic,

neurodegenerative, retinal, immune, hematopoietic

disorders, diabetes, obesity and infections.

DERWENT CLASS:

INVENTOR(S):

BURGESS, C; GUSEV, V Y; LIU, X; MAJUMDER, K;

PADIGARU, M; PATTURAJAN, M; SHIMKETS, R A;

SPADERNA, S K; SPYTEK, K A; TAUPIER, R J; BURGESS,

B04 D16

PATENT ASSIGNEE(S):

(CURA-N) CURAGEN CORP; (BURG-I) BURGESS C; (GUSE-I)

GUSEV V Y; (LIUX-I) LIU X; (MAJU-I) MAJUMDER K; (PADI-I) PADIGARU M; (PATT-I) PATTURAJAN M; (SHIM-I) SHIMKETS R A; (SPAD-I) SPADERNA S K;

(SPYT-I) SPYTEK K A; (TAUP-I) TAUPIER R J

COUNTRY COUNT: PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA	PG

WO 2001074851 A2 20011011 (200172)* EN 194

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2001089274 A 20011015 (200209) A1 20030522 (200336) US 2003096952

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001074851 AU 2001089274 US 2003096952	A2 A A1 Provisional Provisional Provisional Provisional	WO 2001-US10039 AU 2001-89274 US 2000-193205P US 2000-193339P US 2000-195343P US 2000-195005P	20010330 20010330 20000330 20000330 20000405 20000406
	Provisional Provisional Provisional Provisional Provisional	US 2000-195088P US 2000-195792P US 2000-196556P US 2000-197081P US 2000-197087P	20000406 20000410 20000411 20000413 20000414

Searcher :

Shears 571-272-2528

Provisional US 2000-197525P 20000414 US 2001-823187 20010329

FILING DETAILS:

	PATEN	T NO		KIN	D	PATENT	ИО	
	AU 20	010892	74	 A	Based on	 WO 20010	7485	51
PRIOF	RITY A	PPLN.	info:	20 20 20 20	2001-82318 00-193205P 00-193339P 00-195343P 00-195005P 00-195088P	200103. 20000330; 20000330; 20000405; 20000406; 20000406;	US US US US	US
7.11	0001	606080		20 20 20	00-195792P 00-196556P 00-197081P 00-197087P 00-197525P	20000410; 20000411; 20000413; 20000414; 20000414	US US	

AN 2001-626379 [72] WPIDS

AB WO 200174851 A UPAB: 20011206

NOVELTY - An isolated G protein-coupled receptor polypeptide, NOVX (NOV1-10), comprising a sequence (S1) of 395, 227, 1000, 223, 370, 320, 318, 247, 341, 676 or 782 amino acids given in specification (its mature form or variant, where one or more amino acid residues in the variant differs from sequence of the mature form, provided that the variant differs in not more than 15% of the amino acid residues of (S1), is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated nucleic acid molecule (I) or its complement encoding NOVX or a nucleic acid fragment encoding a portion of NOVX or its variant;
 - (2) a vector (II) comprising (I);
 - (3) a cell comprising (II);
- (4) an antibody (III) with selectively binds to NOVX polypeptide;
- (5) determining (IV) the presence or amount of (I) in a sample, by contacting the sample to a probe that binds to (I) and determining the presence or amount of probe bound to (I);
- (6) modulating the activity of NOVX polypeptide, by contacting a cell sample expressing the polypeptide with a compound that binds to the polypeptide to modulate the activity of the polypeptide;
- (7) a pharmaceutical composition (V) comprising NOVX polypeptide, (I) or (III); and
 - (8) a kit comprising (V) in one or more containers.

ACTIVITY - Cytostatic; antidiabetic; virucide; neuroprotective; nootropic; analgesic; antidepressant; antimigraine; anticonvulsant; neuroleptic; antiasthmatic; antiallergic; antiinflammatory; anorectic; antiarthritic; antipsoriatic; antiatherosclerotic; antibacterial; fungicide; osteopathic; protozoacide; antiulcer; hypertensive; hypotensive; antiinfertility; vulnerary. nephrotropic; antilipemic.

MECHANISM OF ACTION - Gene therapy; modulator of NOVX expression or activity. No supporting data is given.

USE - NOVX polypeptides and polynucleotides are useful for treating or preventing a NOVX-associated disorder such as cardiomyopathy and atherosclerosis and a disorder related to cell signal processing and metabolic pathway modulation in a human. NOVX polypeptide is useful for identifying an agent, preferably a cellular receptor or a downstream effector that binds to the polypeptide and an agent that modulates the expression or activity of the polypeptide. NOVX polypeptides and (I) are useful for determining the presence of or predisposition to a disease associated with altered levels of NOVX polypeptide and polynucleotide, in particular cancer, by measuring the level of polypeptide expression or the amount of nucleic acid from a mammal and comparing it with another mammal not having or not predisposed to the disease. (III) is useful for determining the presence or amount of NOVX polypeptide in a sample and for treating or preventing a NOVX-associated disorder such as diabetes and a disorder related to cell signal processing and metabolic pathway modulation in a human. (III) and a polypeptide having 95% sequence identity to NOVX polypeptide are useful for treating a pathological state in a mammal (all claimed). NOV1 polypeptide is useful in therapeutic and diagnostic applications in disorders characterized by protease inhibition and carcinoma, e.g. squamous cell carcinoma, NOV2 polypeptide is useful in therapeutic and diagnostic applications in hyperproliferative disorders e.g. cancer, neurologic disease, immune disorders, and viral infections, NOV3 polypeptide is useful in therapeutic and diagnostic applications in developmental and proliferative disorders, e.g. angiogenesis, cell signaling disorders, cancer, fertility disorders, reproductive disorders, tissue/cell growth regulation disorders and NOV4 polypeptide is useful in therapeutic and diagnostic applications in disorders including cystic fibrosis, congenital myotonia, Dent disease, X-linked renal tubular disorder, leukoencephalopathy, malignant hyperthermia and hypertension. NOV5 polypeptide is useful in treating various conditions such as seizures, Alzheimer's disease, sleep disorders, appetite disorders, thermoregulation, pain perception, hormone secretion and sexual behavior, mental depression, migraine, epilepsy, obsessive-compulsive behavior (schizophrenia), drug addiction and affective disorders and NOV6 polypeptide is useful for treating olfactory, digestive, oral immunologic disorders, inflammatory processes in the airways due to allergy/asthma, emphysema or viral infection, cystic fibrosis and obesity. NOV7 polypeptide is useful in therapeutic and diagnostic applications in disorders characterized by inflammation, e.g. asthma, arthritis, psoriasis, inflammatory bowel disease and NOV8 polypeptide is useful in cancer, lymphoproliferative syndrome, cerebral palsy, epilepsy, and other disorders. NOV9 polypeptide is useful for treating cell proliferation disorders, developmental disorders and nephrogenesis and NOV10 polypeptide is useful in therapeutic and diagnostic applications in various disorders e.g. adrenoleukodystrophy, kidney disease, atherosclerosis and inflammation. The NOVX antibodies and nucleic acids are also useful for treating the above conditions. The NOVX nucleic acids and polypeptides are useful for treating retinal diseases, bacterial, fungal, protozoal infections, hypotension, anorexia, osteoporosis, multiple sclerosis, ulcer, myocardial infarction and various dyslipidemias. NOVX nucleic acids and

polypeptides are useful to screen for molecules which inhibit or enhance NOVX activity or function and are also useful as targets for the identification of small molecules, that modulate or inhibit e.g. neurogenesis, cell differentiation, motility, proliferation, hematopoiesis, wound healing and angiogenesis. (I) is useful for expressing NOVX protein, to detect NOVX mRNA, or a genetic lesion in a NOVX gene and to modulate NOVX activity. NOVX sequences are also useful for identifying a cell or tissue type in a biological sample, to amplify DNA sequences from very small biological samples such as tissues e.g. hair, skin or body fluids in forensic biology and as primers and probes for use in identifying and/or cloning NOVX homologs in other cell types. NOVX protein is useful as an immunogen to generate antibodies which are useful for diagnostically monitoring protein levels and modulate NOVX activity. Cells comprising (I) are useful for producing non-human transgenic animals which are useful for studying the function and/or activity of NOVX protein and for identifying and/or evaluating modulators of NOVX protein activity. Dwg.0/0

L28 ANSWER 8 OF 8 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 2001-570869 [64] WPIDS

DOC. NO. NON-CPI: N2001-425411

DOC. NO. CPI: C2001-169766

TITLE: Novel polypeptides and nucleic acids homologous to members of collagen, potassium channel, tuftelin family of proteins for diagnosing treating cancer.

family of proteins for diagnosing, treating cancer, atherosclerosis, neurological, skin and enamel

defect disorders.

DERWENT CLASS: B04 D16 S03

INVENTOR(S): FERNANDES, E; LI, L; MAJUMDER, K; PADIGARU, M;

SHIMKETS, R A; SPADERNA, S K; VERNET, C A M;

FERNANDES, E R

PATENT ASSIGNEE(S): (CURA-N) CURAGEN CORP; (FERN-I) FERNANDES E R;

(LILL-I) LI L; (MAJU-I) MAJUMDER K; (PADI-I) PADIGARU M; (SHIM-I) SHIMKETS R A; (SPAD-I)

SPADERNA S K; (VERN-I) VERNET C A M

COUNTRY COUNT: 96

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

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RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC

MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ

DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE

KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO

NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ

VN YU ZA ZW

AU 2001043569 A 20010924 (200208)

EP 1263955 A2 20021211 (200301) EN

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK

NL PT RO SE SI TR

US 2003064489 A1 20030403 (200325)

JP 2003526369 W 20030909 (200360) 173

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001068851	A2	WO 2001-US7735	20010312
AU 2001043569	A	AU 2001-43569	20010312
EP 1263955	A2	EP 2001-916558	20010312
		WO 2001-US7735	20010312
US 2003064489	Al Provisional	US 2000-188277P	20000310
	Provisional	US 2000-188316P	20000310
	Provisional	US 2000-189139P	20000314
	Provisional	US 2000-189140P	20000314
	Provisional	US 2000-190231P	20000317
	Provisional	US 2000-190401P	20000317
		US 2001-804014	20010312
JP 2003526369	W	JP 2001-567335	20010312
		WO 2001-US7735	20010312

FILING DETAILS:

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PATENT NO	KIND	PATENT NO
EP 1263955	A Based on A2 Based on W Based on	WO 2001068851 WO 2001068851 WO 2001068851
PRIORITY APPLN. INFO:	2000-188277P 2000-188316P 2000-189139P 2000-189140P 2000-190231P 2001-804014	20000317; US 20000310; US 20000310; US 20000314; US 20000314; US 20000317; US 20010312
AN 2001-570869 [64]	WPIDS	

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NOVELTY - Isolated NOVX (NOVX1-11) polypeptides, are new.

DETAILED DESCRIPTION - Isolated NOVX (NOVX1-11) polypeptides, are new.

A NOVX polypeptide is selected from:

- (a) a mature form of a sequence (S1) of 298, 283, 298, 559, 251, 335, 335, 351, 163, 134 or 145 amino acids defined in the specification or its variant, where any amino acid in the mature form is changed to a different amino acid, provided that not more than 15% of the amino acid residues in the sequence of the mature form are so changed;
- (b) an amino acid sequence selected from S1 or its variant, where any amino acid in the mature form is changed to a different amino acid, provided that not more than 15% of the amino acid residues in the sequence of the mature form are so changed;
 - (c) a fragment of (a) or (b).
 - INDEPENDENT CLAIMS are also included for the following:
 - (1) an isolated nucleic acid molecule (I) selected from:
- (a) a nucleic acid encoding a NOVX polypeptide as described above;
 - (b) a nucleic acid fragment encoding a portion of S1 or its

variant, where any amino acid of the chosen sequence is changed to different amino acid, provided that not more than 10% of the amino acid residues in the sequence are so changed;

- (c) the complement of the nucleic acid of (a) or (b);
- (2) a vector (II) comprising (I);
- (3) a cell comprising (II);
- (4) an antibody (III) with selectively binds to a NOVX polypeptide as described above;
- (5) determining the presence or amount of (I) in a sample, by introducing the sample to a probe that binds to (I) and determining the presence of probe bound to (I);
- (6) modulating the activity of a NOVX polypeptide, by contacting cell sample comprising NOVX polypeptide with a compound that binds to the NOVX polypeptide to modulate its activity;
- (7) a pharmaceutical composition (IV) comprising NOVX
 polypeptide, (I) or (III);
 - (8) a kit comprising (IV) in one or more containers; and
- (9) screening (V) for a modulator of activity or of latency or predisposition to a pathology associated with NOVX polypeptide, by:
- (a) administering a test compound to a test animal which recombinantly expresses NOVX polypeptide at increased risk for a pathology associated with NOVX polypeptide;
- (b) measuring expression or activity of the protein in the test animal; and
- (c) comparing the activity of the protein in the test animal with the activity of the control animal, where a change in the activity of the polypeptide in test animal relative to control animal indicates that the test compound is a modulator.

ACTIVITY - Cytostatic; Nootropic; Neuroprotective; Vulnerary; Cerebroprotective; Antiparkinsonian; Hypotensive; Antiasthmatic; Antidiabetic; Antipsoriatic; Antiinflammatory; Immunosuppressive; Antiatherosclerotic; Dermatological.

No supporting biological data is given.

MECHANISM OF ACTION - Gene therapy.

No supporting biological data is given.

USE - NOVX polypeptides, (I) and (III) are useful for treating or preventing a pathology associated with NOVX polypeptide in humans and for treating a syndrome associated with human disease.

NOVX polypeptides and (I) are useful for determining the presence of or predisposition to a disease associated with altered levels of NOVX polypeptide and **polynucleotide**, by measuring the level of polypeptide expression or the amount of nucleic acid from a mammal and comparing it with another mammal not having or not predisposed to the disease.

NOVX polypeptide is also useful for identifying an agent that binds to it and a cell expressing NOVX polypeptide is useful for identifying a therapeutic agent for use in treatment of a pathology related to aberrant expression or physiological interactions of the polypeptide. (III) and a polypeptide having 95% sequence identity to NOVX polypeptide are useful for treating a pathological state in a mammal. (III) is also useful for determining the presence or amount of NOVX polypeptide in a sample (claimed).

NOV1-3 polypeptides are useful in therapeutic and diagnostic applications in disorders characterized by altered cell motility, proliferation and migration e.g. cancer, angiogenesis and wound healing. NOV4 is useful in treatment and diagnosis of neurological

disorders, e.g. episodic ataxia, autosomal dominant myokymia, stroke, Parkinson's disease, Alzheimer's disease, non-insulin dependent diabetes mellitus, asthma, hypertension and seizure. NOV5-7 are useful in treatment and diagnosis of disorders characterized by enamel defects, such as amelogenesis imperfecta and disorders involving enamel defects, including hypoplasia and hypomineralization. NOV8 is useful in treatment and diagnosis of paraneoplastic neurological disorders, e.g. paraneoplastic limbic of brain-stem encephalitis occurring during testicular cancer, diabetes, reproductive health, metabolic and endocrine disorders, gastrointestinal disorders, immune disorders and autoimmune diseases, respiratory disorders, bone disorders, musculoskeletal disorders, leukemia/lymphoma and tissue/cell growth regulation disorders. NOV8 is also useful as a marker for human chromosome 14. NOV9-10 are useful in treatment and diagnosis of disorders characterized by aberrant keratinocyte differentiation, e.g. lesional psoriatic skin and oral mucosa. NOV11 is useful in treatment and diagnosis of disorders characterized by inappropriate proteolysis, e.g. atherosclerosis and abdominal aortic aneurysm and neurological disorders. NOV11 is also useful in identifying cystatin-interacting proteins and as a marker for the region of human chromosome 20p11.21-12.3. NOVX nucleic acids and antibodies are also useful in treatment and diagnosis of the above conditions. NOVX nucleic acids and polypeptides are useful to screen for molecules which inhibit or enhance NOVX activity or function and are also useful as targets for the identification of small molecules, that modulate or inhibit e.g. neurogenesis, cell differentiation, motility, proliferation, hematopoiesis, wound healing and angiogenesis. Dwg.0/0

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